


1964

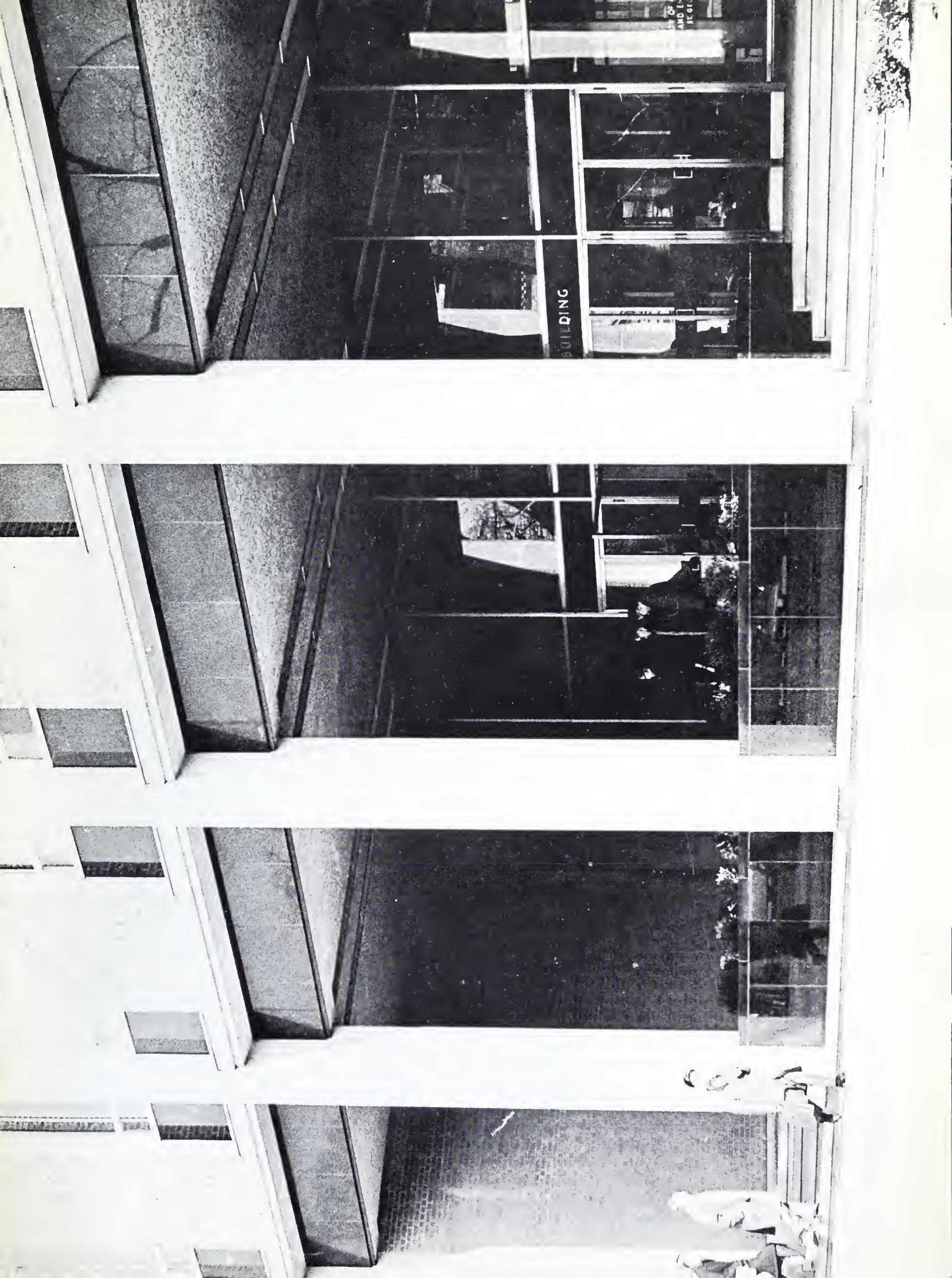


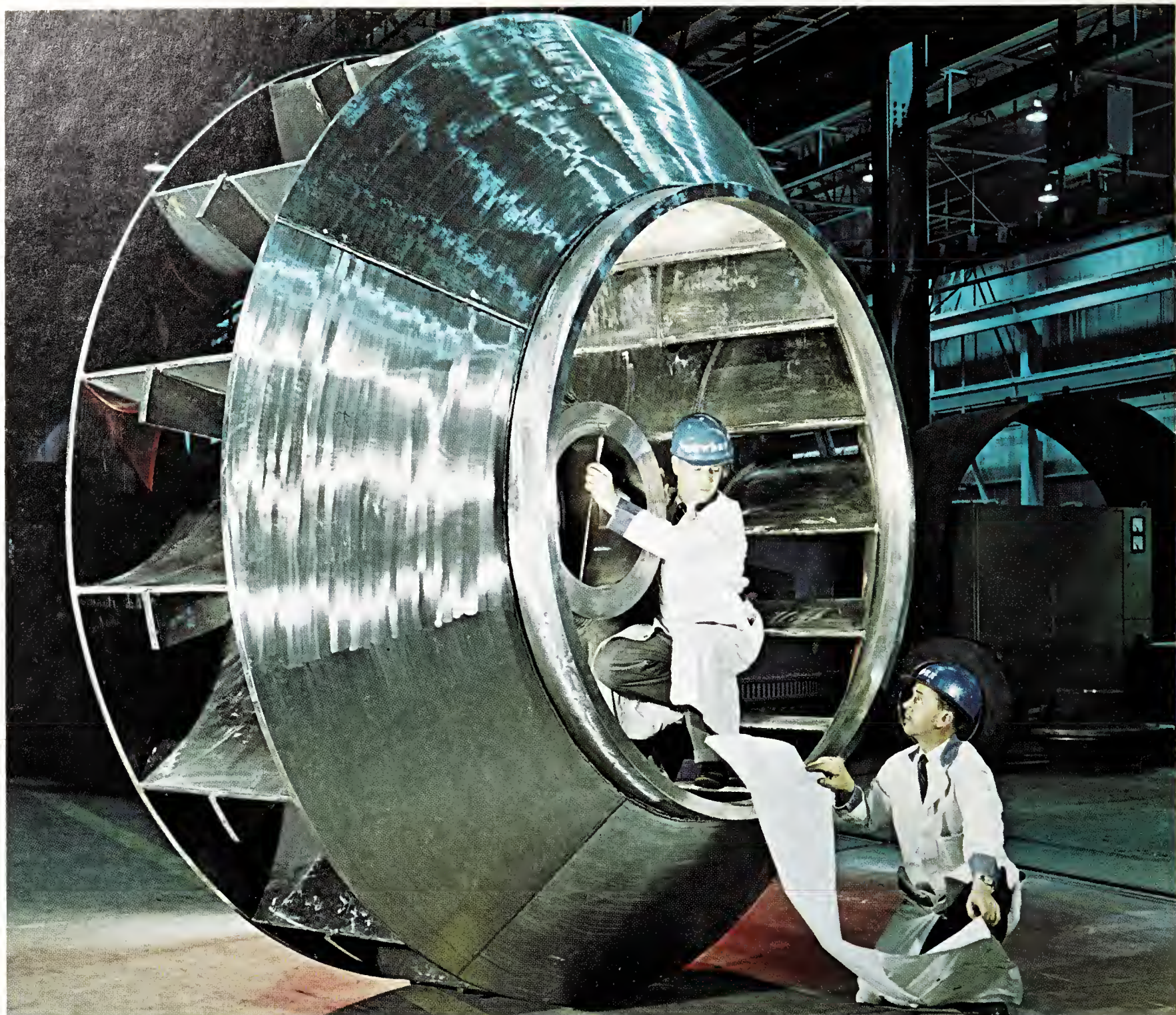
THE SCHOOL YEARBOOK



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Cool beauty for a hot job

A tough impeller constructed entirely of Type 316 stainless steel is an unusual feature of a new recuperation air fan designed and built by James Howden and Parsons of Canada Ltd. for the INCO iron ore pelletizing plant at Copper Cliff, Ontario.

The wheel stands 10 feet high and the complete impeller (see photo) weighs nearly 14 tons.

The fan was built to handle over 400,000 cubic feet per minute of extremely hot gases containing highly abrasive ore particles. Fan casing and inlet boxes were fabricated in Stelcoloy (a high strength, low alloy steel), and the structure is supported above its centreline by special pads to permit controlled expansion at operating temperatures in excess of 1000° F.

HOWDEN & PARSONS

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school yearbook

A Message

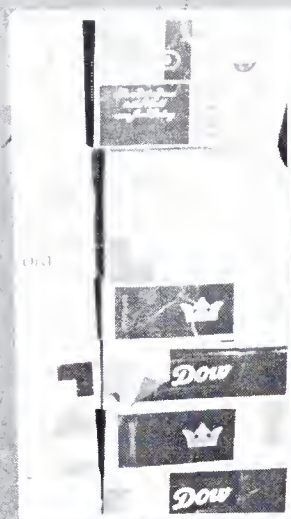
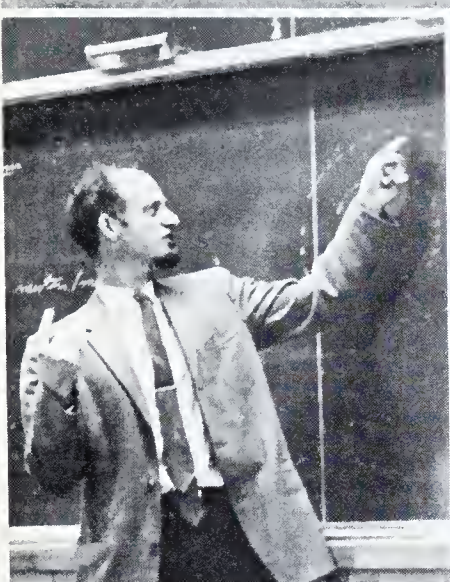
As I write this message the Engineering Society of the University of Toronto is completing the business of its 78th year of operation. On a short term basis the events of each year seem remarkably similar, to the extent that the arduous tasks of the Engineering Society Executive are taken for granted. This year's executive has put a lot of effort into the many events of Skule, assisted by the corps of volunteers who inhabit the Engineering Store with the result that once again we can say we had a successful year. The established events such as Cannonball, Skule Nite and the Skule At Home were all outstanding this season, and the Varsity, as usual, distinguished itself in the traditional fall smear of the Engineering Society.

During my stay at Skule I feel I have seen a few trends which could turn out to be more significant than the short term considerations of specific events. The change most hoped for by myself is that the Engineers take a more active part in the world beyond the boundaries of the south end of the campus. Recently such a trend has been observed in the opening of some of our events to other students, and the assistance and services rendered to the S.A.C. and Blue and White Society on many occasions. Recall that the song "Godiva" contains the following line "We don't give a damn for any damn man who don't give a damn for us." Notice that this makes absolutely no mention of the sort of treatment someone who does give a damn for us can expect. I would like to suggest that the developing attitude is "We do give a damn for any damn man who does give a damn for us" which bears a certain resemblance to the Golden Rule.



In closing I would like to thank all those who have worked with us this year, and hope that the class of 6T4 will feel, as I do, that they have benefited by taking advantage of the opportunities offered by the University, both academic and otherwise.

Best wishes on the examinations,
DONALD M. MONRO
PRESIDENT.



what is an engineer?

A Message from the Dean

It is a pleasure to write a few words for the Yearbook, and I appreciate the courtesy of being asked to do so. The Yearbook is a very useful and appropriate publication among those having their origin in this faculty. It illustrates and records for the future those activities that form a part of the total university experience of undergraduates, a part that virtually everyone regards as essential to the true education process. Whereas all undergraduates of the faculty will enjoy and treasure it, it is particularly significant for member of the graduating class, who, I confidently predict, will turn to it with pleasure from time to time as the years go by, and who will produce it triumphantly at their fiftieth re-union in 2014: Having agreed sincerely and whole-heartedly that the book represents an important side of our communal life, it would be out of character (and almost improper!) if I did not refer to the other side of the coin, and remind us all that the primary objective of students in this faculty is to prepare themselves to the best of their ability and ours to enter professional lives in the service of humanity. I say "in the service of humanity" because engineers are in a particularly advantageous position by reason of their profession to achieve that goal. I stress the academic side of our activities in these remarks in the Yearbook because one of the most valuable personal characteristics we can develop at university is a sense of balance of values, and one of the most important aspects of such a balance is to be found in our decisions with respect to extra-curricular activities and strictly academic pursuits. It is important that students in the junior years, especially, learn quickly to make wise decisions in these matters.

Whereas it would be undesirable to attempt here anything like a complete review of the year, three events might be commented upon.

The first of these was the Ford Foundation grant of \$2,325,000 to this faculty to strengthen graduate work. I take this to be a tribute to our student body, past and present; to our staff, past and present; and to our university as a whole. Grants of this sort do not come unless quality is high. We must, however, temper our satisfaction



with the strongest determination to make the best possible use of the splendid opportunity given to us. Some of the new and highly sophisticated equipment made possible by the grant is already to be seen in the research laboratories of the faculty.

The second event upon which I should like to comment was the exchange weekend arranged by the Engineering Society with students from Ecole Polytechnique, Montreal. I was privileged to be invited to attend one of the sessions, and I was deeply impressed. Nothing but the greatest good came from such activities.

And finally I should like to recall that three of our professors, Professor C. F. Morrison, G. R. Slemon and I. W. Smith, have been in Mangalore, India, on leave of absence this year, to help in the establishing of a new engineering college there.

These last two events are what I had in mind when I used the expression "to enter professional lives in the service of humanity." To be technically proficient engineers is not enough. Our horizons must be wider. And they are.

R. R. McLaughlin,
Dean,
Faculty of Applied Science
and Engineering.

What Is an Engineer?

We are just beginning to realize the immense size of the demands which the rapidity of technological change is making on engineers.

Those who know the truth understand the role that engineers have played in building our industrial activity, in developing the principles of mass production, and in giving our people their high standards of living. Vast new areas of knowledge have enlarged the foundations of engineering and the engineer currently emerging from university has even newer fields of endeavour opening to him which far exceed those known to his predecessors.

In this world of technological and political change the task of our civilization is to build a bridge between material and moral progress. I believe that a great share of this monumental task must fall to the engineer. When the future may depend so much upon the engineer we would do well to consider who and what he is.

He is a man who is inextricably tied to all mankind. The world population of today, 2-1/2 billion, will become 5 billion in fifty years. Yet, today, one-half of this population is undernourished. Thus, one of the main tasks of this generation is the fight against hunger. Only by advanced technical means in the hands of men dedicated to the service of humanity can this fight be carried on. A creator of technical progress, the engineer is the source of moral progress. In addition to understanding the physical sciences in depth he must also understand their exploitation and the manner in which his creations are used. It is not enough to solve the problems of food, housing or energy, if the moral needs of humanity are overlooked.

Engineer derives from the old Latin and French word "ingenium" meaning cleverness combined with a good deal of art or craftsmanship. It literally means cleverness in contriving, devising or inventing. The engineer of today certainly possesses these characteristics. His basic education has equipped him for the performance of analysis and creative design, or the functions of construction, production or operation where a knowledge of the analysis and de-

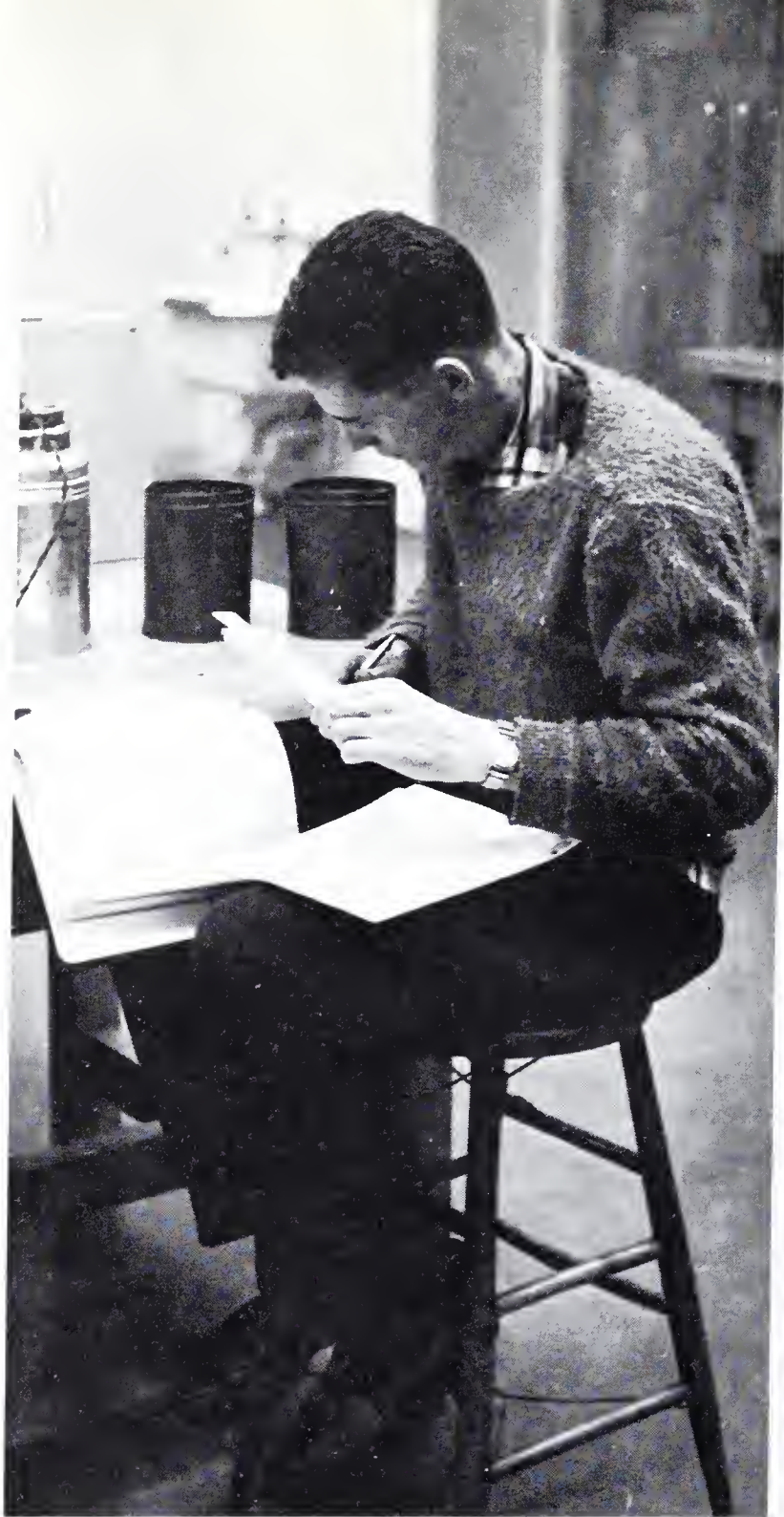


sign of the structure, machine or process is essential. He has mastered the fundamental scientific principles associated with his branch of engineering.

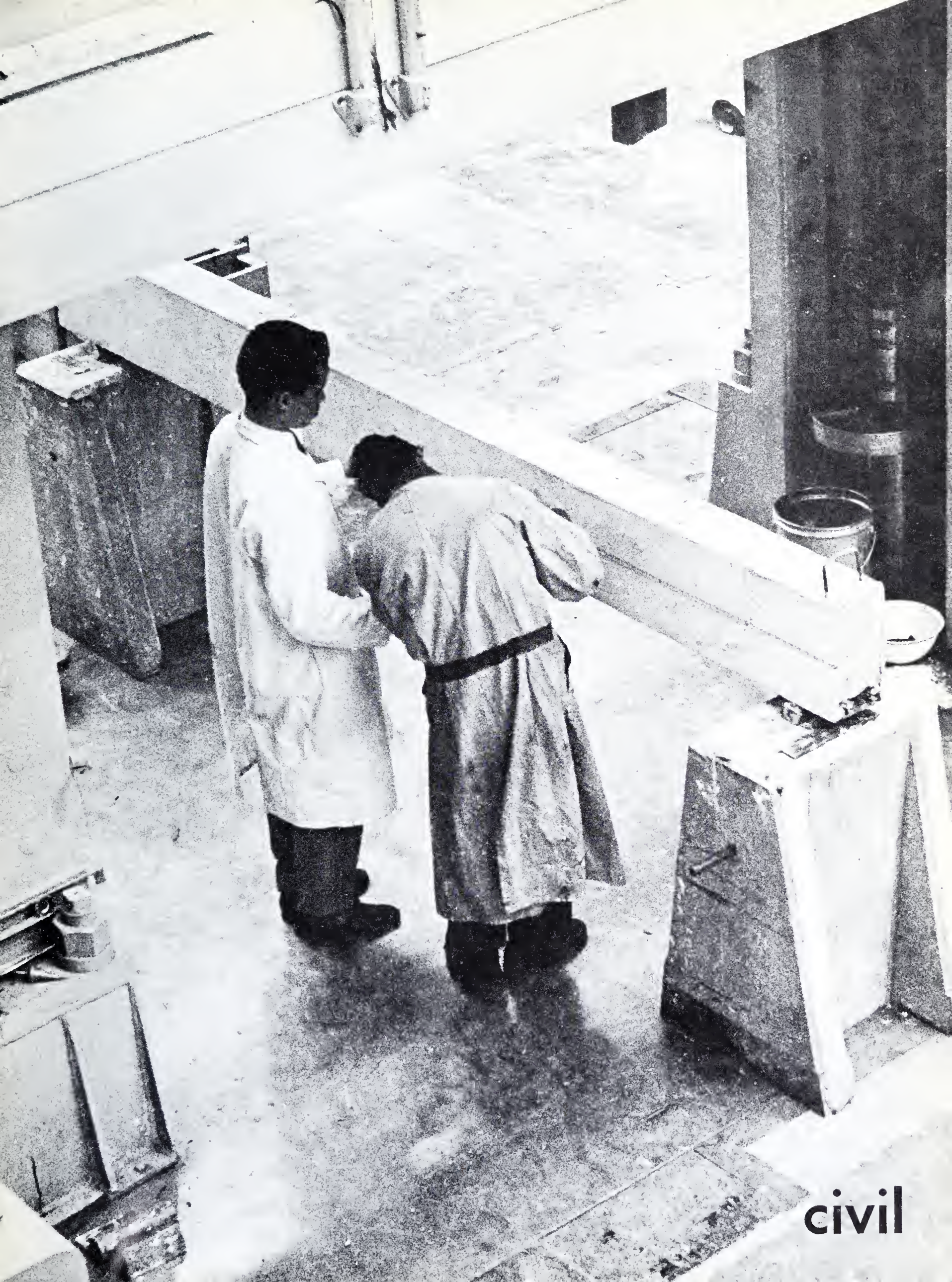
He has learned the importance of leadership and has developed a deep sense of professional ethics.

Frequently he is one who has entered into his career for negative reasons rather than positive ones. He probably entered engineering because of a proficiency in mathematics and science in high school; he rejected a course in pure science because he wanted to work with **things** rather than **concepts**. But, no matter the reason why he is an engineer he has come to understand the challenge of his profession: to prepare not for today's jobs but for the tasks of the future.

Blake H. Goodings, P.Eng.
Director,
Employment Advisory Service
Association of Professional Engineers
of Ontario.



who we are



civil

The Civil Engineering Club was very active, as usual, again this year. One of the biggest steps taken was the collaboration with the Electrical Engineering Club to obtain a soft drink machine for the Galbraith Building. The Chemical Club reports that this is a highly lucrative enterprise and is invaluable as a source of funds for promoting other school functions. The Union Station Oak Room was the scene of the loudest blast of the year — The Civil Club Dance! Everyone, especially the staff seems to relax (?) here a bit more than usual. The Dinner, held again at Mal-loney's Art Gallery featured Dr. R. Soberman as guest speaker. Dr. Soberman is a very re-mment addition to the Civil Engineering staff and has travelled widely while working in the feld of highway engineering and was a very interesting speaker. Also featured as Club activities were the Freshman Tour, the Heart Fund Drive, and a Civil Hockey Tournament. As a final activity, the Club executive, in col-laboration with the electrical club, set up the machinery for a giant Open House to be held next year in the Galbraith Building.



civil club



Civil Ia—anonymous



FIRST ROW: R. M. Platt, J. P. Seaton, J. E. Geall, B. M. Padalak, J. H. VanPaorten, T. E. Taylor, H. A. Tanenbaum, R. Carlett.

SECOND ROW: N. Palychranopoulos, J. E. Smith, H. W. Wandschneider, S. Lowson, J. A. Wheatley, L. Steffner, M. Sakalsky, W. A. McIntash.

THIRD ROW: J. Radley, J. E. Lugsdin, J. E. Lewis, H. J. Rerup, A. A. Dittrich, R. G. Parter, K. J. Senter, V. Slater, S. Reisman.

FIFTH ROW: A. W. Ritchie, G. W. Thaburn, R. M. Symyk, B. R. Whitehead, T. Swain, R. H. Reynolds, D. Matthews, J. A. Micules, G. F. Smerdan, W. K. Enders, J. D. Wright.

FOURTH ROW: F. E. Pica, M. W. Sparks, J. H. Shearlin, P. D. Scott, F. R. Campbell, V. V. Worang.

ABSENT: R. Newman.

I civil



FRONT ROW: J. Vickers, M. Laudan, L. Atkinson, I. Hale, M. Esmits, V. Masemann, R. MacDanald.

SECOND ROW: T. Tam, C. Acvi, R. Ilves, B. Fulfard, D. Miller, J. Metcalfe.

THIRD ROW: L. Tomson, K. Sa, W. Summer, R. Petersen, L. Cavdiff, J. Nagy, M. Gilmour, C. Poczyniak, E. Friend, D. Taylor.

FOURTH ROW: R. Shiami, V. Baihnik, B. Turner, G. Richer, P. Laughton, J. Sherk, Kubsch, J. Diciara, D. Floyd.

FIFTH ROW: B. Chang, Fink, G. Sedgwick.

II civil



FRONT ROW: R. Halawka, P. K. C. V., J. Miller, Miss Sue Jael, B. Martin, A. Paolini, A. Lacey.

SECOND ROW: T. Rukholm, W. Niedzeilski, R. Sandersan, E. Sandersan, R. Adamcyk, E. Kralik, D. Sefton, J. Pernica, B. Elsan, W. Copeland, D. DeCarli, W. Archer.

THIRD ROW: J. Stasiuk, V. Lenius, R. Smith, F. Martin, W. Daherty, J. McDaugal, J. MacInnis, L. Lavigne, W. Balfaur, P. Earl, B. Kitchen, D. Dunlop, W. Huttan.

ABSENT: W. A. Habkirk.





survey camp





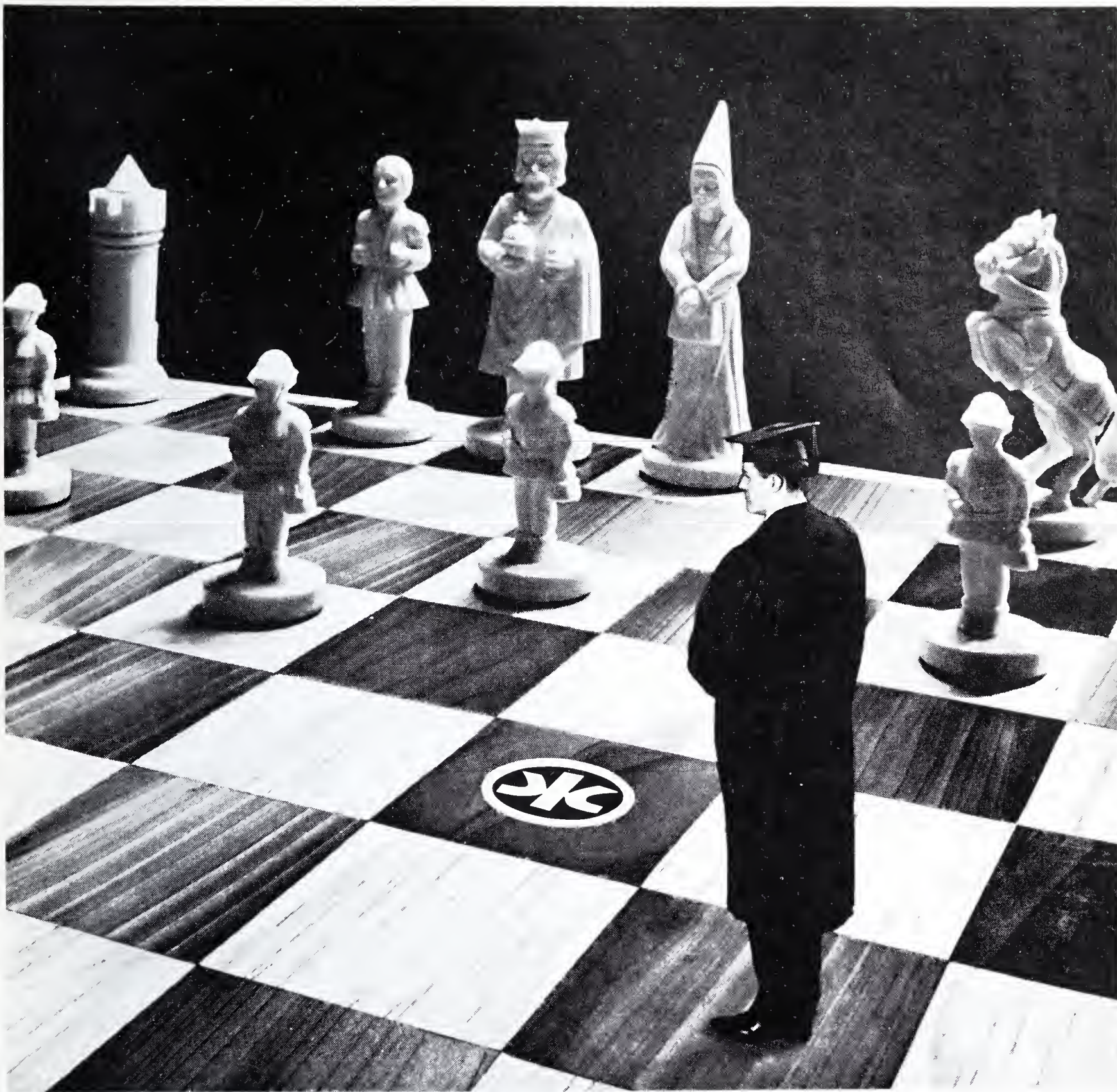
FRONT ROW: Kaminker, A. J., Sepala, A. M., Schnarr, B. F., Fines, E. G., Medicky, B. N., Bauer, G. E.

SECOND ROW: Maybank, B., Gibbans, D. E., Ife, J. S., Rabitaille, G. R., Tai, K. S., Bukajemsky, S., Pekau, O. A.

THIRD ROW: Marks, P. L., Rausson, L., Amarel, R. H., Embree, N. L., McNally.

FOURTH ROW: Talbot, D. N., Keenan, F., Lafarge, R. C., Bryson, F. J., Craig, W. G., Butti, R. A., Kargel, R., Dmytriw, D. T., Willis, D. H.

FIFTH ROW: Waytowich, E. M. E. Z., Bush, J., Chapman, P. M.F., Manson, W. D., Ireland, P. S., Ritchie, J. K.



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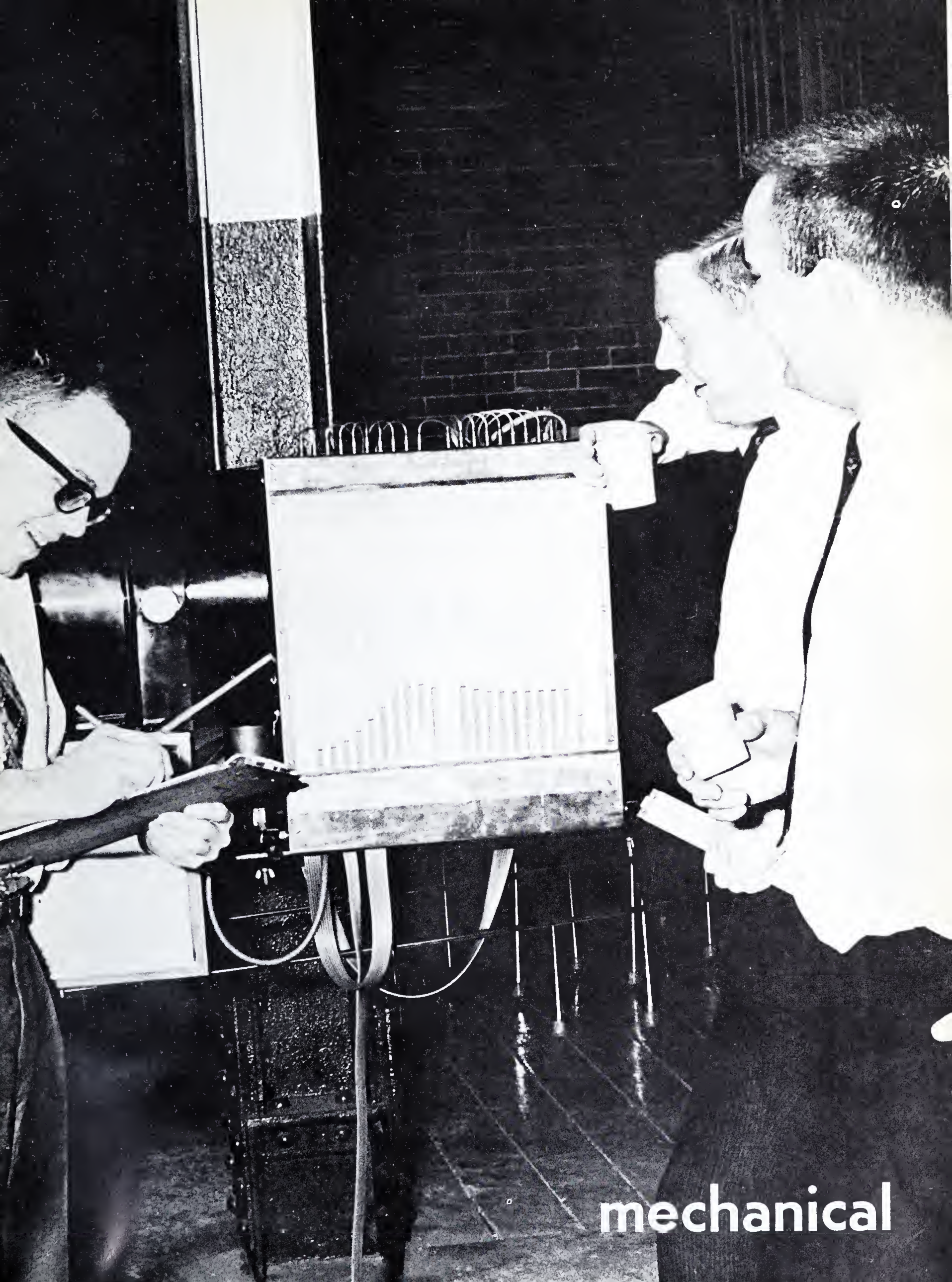
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mechanical

Perhaps the most important doing of the Mechanical Club this year was a revision of the Club's Executive. The addition of four members not only increases the administrative efficiency of the club but may make for a 10% increase in the attendance at next year's Mechanical Club Dance (since the executive gets free tickets).

Aside from this, the usual activities were enjoyed. i.e. hockey tournament, the smoker, participation in the chariot race and the inter-course competition and of course this year's Mechanical Club Dance.



mechanical club



FIRST ROW: X. Bullwinkle, M. Woolley, G. Reed, M. Takevchi, M. Pitt, P. Smith, J. Sobieniak, C. H. Yu.

SECOND ROW: J. Flatt, J. Cupp, H. Walker, P. Ward-Whate, B. Walker, H. Sumi.

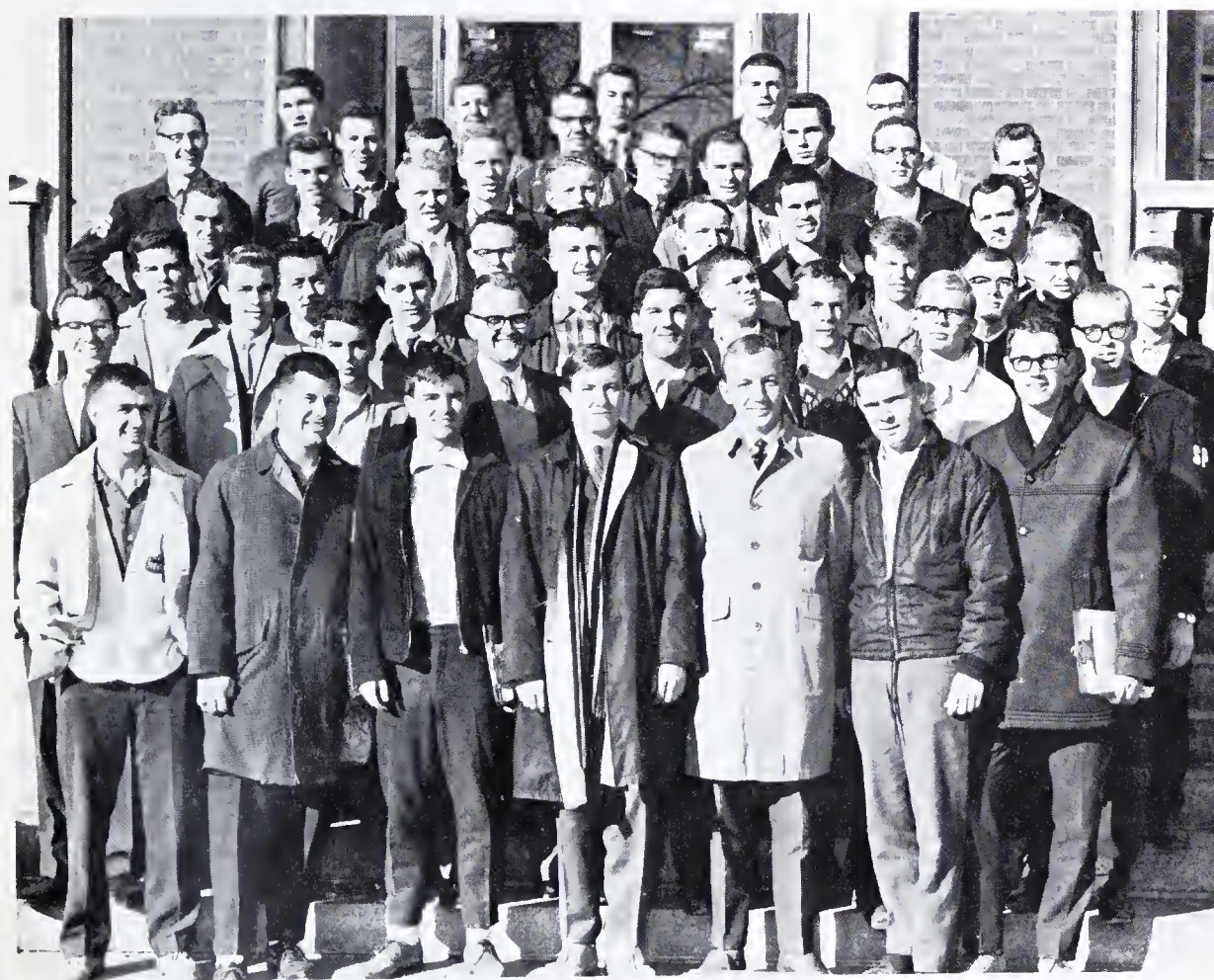
THIRD ROW: J. Korim, R. Dumala, B. McWhirter, D. Sweet, L. Shrdlu, K. Weber, T. McKenzie.

FOURTH ROW: E. Paskewich, B. Clark, A. Grout, J. Minett, E. Pet-
raff, J. Mcluckie, B. Burnside, L. Mather.

FIFTH ROW: G. McGregor, R. Honig, L. DeBoer, J. Andre, G. Collinson, J. Hansen, B. Bird, D. Moffat.

SIXTH ROW: W. Barker, B. Fin-
layson, R. Ball, D. Martin, A. Eng-
lish (Industrial), H. Fenske, B. Brown, G. Moore, A. Barrett, D. Hobbs, R. Johnson, E. Eisen, B. Adamson, R. Burnside, R. Bailey, R. Beare, R. Hari.

I mechanical



FIRST ROW: Jim Groves, Gord Fraser, Mike Bell, Bob Robertson, Geoge Robson, Steve Jack, Keith Jones.

SECOND ROW: Jerry Forest, Jur-
gen Volling, Mel Goldenson, Mart Aviste, Pete Rees, John Corley, John Brawshaw, Brian Wilcox.

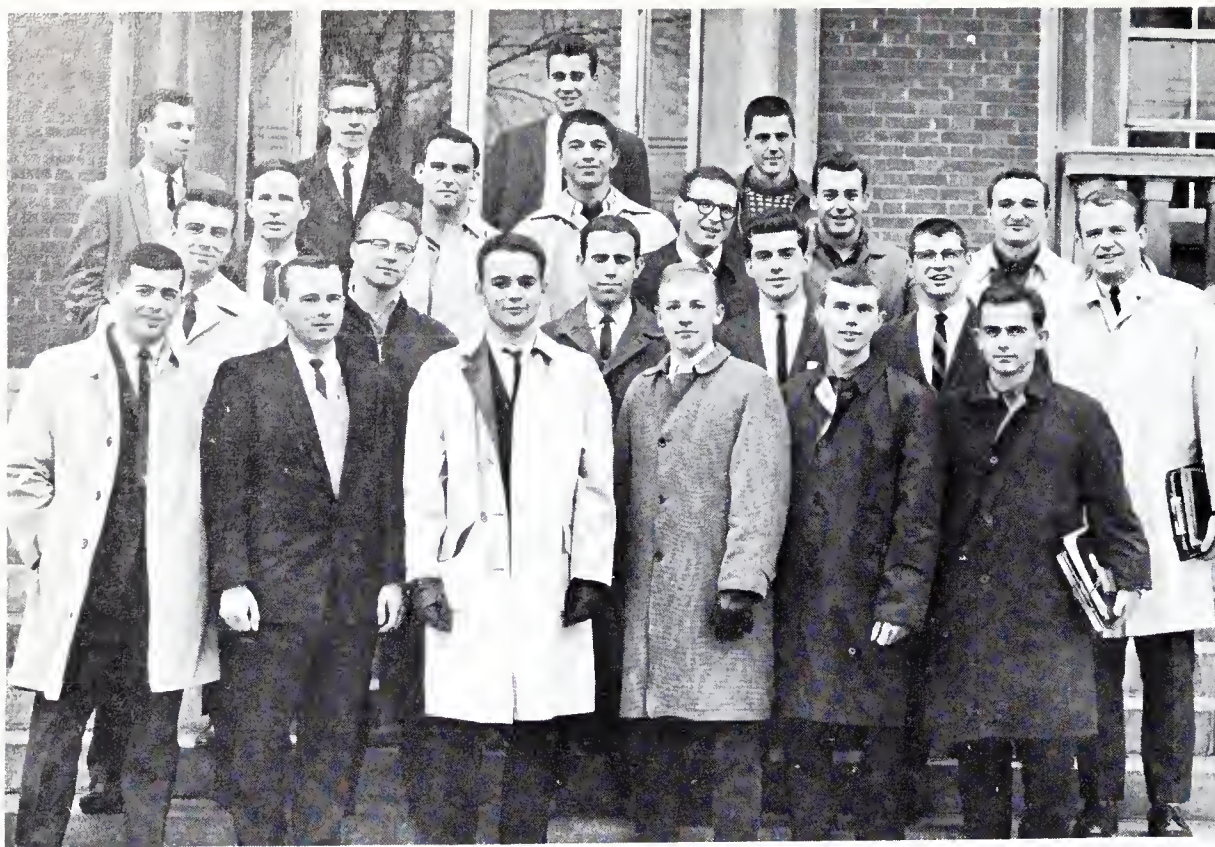
THIRD ROW: Bob Hayes, Ian Eng, Ed Marks, Rolf Eichfuss, Jim War-
nock, Bob Sawyer, Dennis Han-
cock, Dave Lemke.

FOURTH ROW: Don McLeod, Ivar Raas, Dave Measor, Graeme Robb, Pete Conquergood, Bruce Lounds, Tom MacMillen, John Szabo.

FIFTH ROW: Reg Davis, Bob Car-
ter, John Morris, John Miller, Barry Thomson, Jim Platten, Al Jacobs.

BACK ROW: John Rosenthal, Paul Bodach, Jim Leitch, Harvey Ewing.
SIXTH ROW: Bernie Brandt, A. Fink, Another Fink, Phil Parry, Alex Peto.

II mechanical



FRONT ROW: Denis Paraczchych, Ed Kolaska, Bernie Little, David Hipgrave, Lawrence Payton, Nelson Melnyck.

SECOND ROW: Bob Lowden, Don Draper, Dave Stickney, Clive Bridges, Doug Bain, Einars Soste.

THIRD ROW: Bob Monrad, Mike Walsh, Bill Ratcliff, Lou Scagnetti, Jom Ozryzlo, Al Brown.

FOURTH ROW: Don Faulkner, Paul Howard, Doug Lamb, Tom Mann.

The following were absent, due to their presence at the Waverly: Earl Fagan, Ron Fawcett, John Ferguson, Bob Ferguson, Joe Gilling, John Smallman, T. Taniguchi.

III

mechanical



BACK: N. R. Gill, J. Reixach, B. V. Bush, J. Rosbak, J. Misiaszek, R. K. Alber, B. W. Brodie, R. F. German, J. W. Webster, J. P. Veal, W. Brest, Van Kempen, T. Sakamoto, S. A. Black, J. T. Kerr, Y. Sakuma, R. S. Higgins, J. S. Burgess, J. F. Woodcock, W. J. Moses, P. H. G. Smith, D. S. Weaver, J. Skotnicki, C. E. Wise, J. Vyas, W. J. G. Szpikowski, K. L. Sung, K. Herath, D. W. Wood, F. C. M. Cryns.

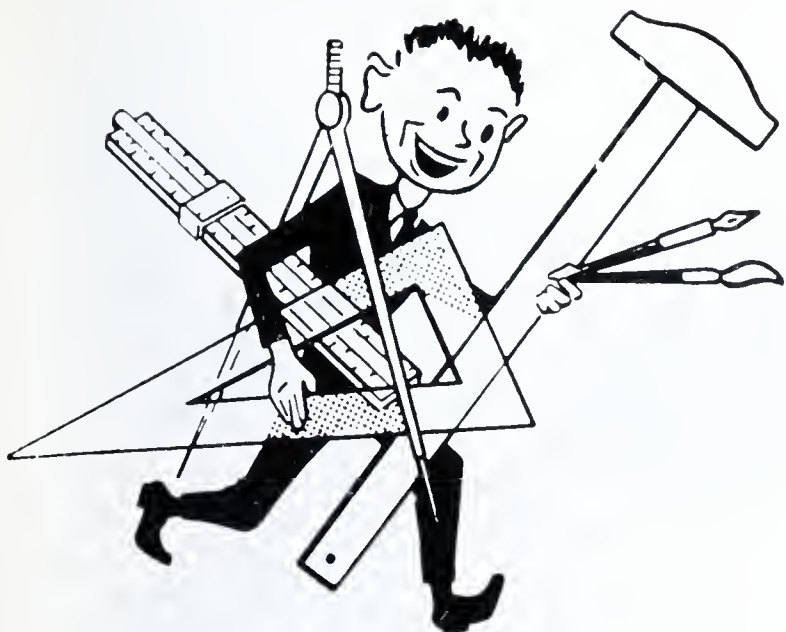
FRONT: A. Missana, W. E. Wright, B. K. Jeun, D. J. Daffin, L. E. Wilson, D. T. Langstone.

ABSENT: J. E. Botsford, R. E. Brookes, G. R. Burkholder, G. K. Cooper, A. J. Crljenko, G. A. Fowler, E. E. Galea, T. A. Hunter, J. M. Ito, V. I. Johannes, F. K. C. Kan, W. U. E. Michael, A. Miklosik, L. E. Reed, R. J. Royle, D. G. Shaw, D. M. Smith, I. C. P. Sturdee, J. A. Young.

Those crossed out weren't supposed to be there.

IV

mechanical



SURE . . .
I GOT 'EM ALL AT

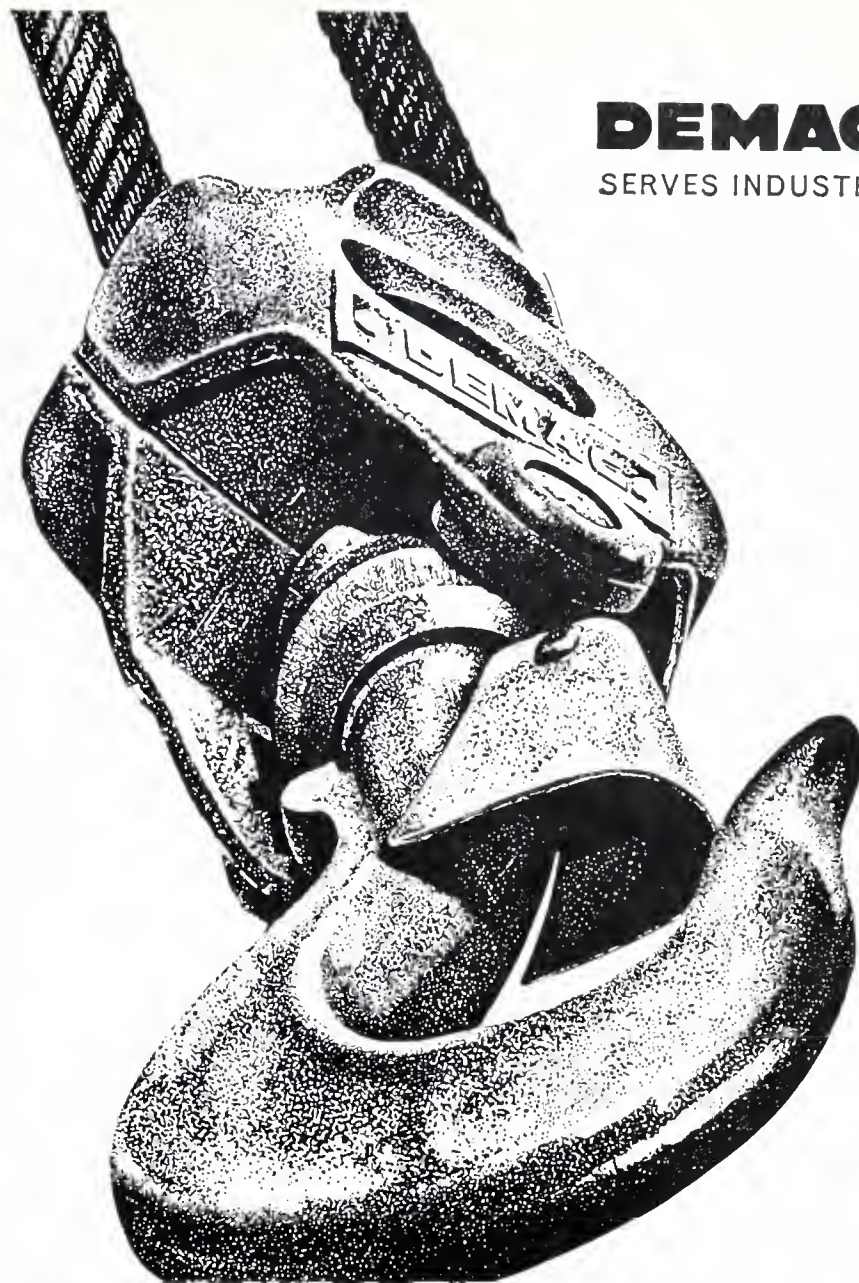
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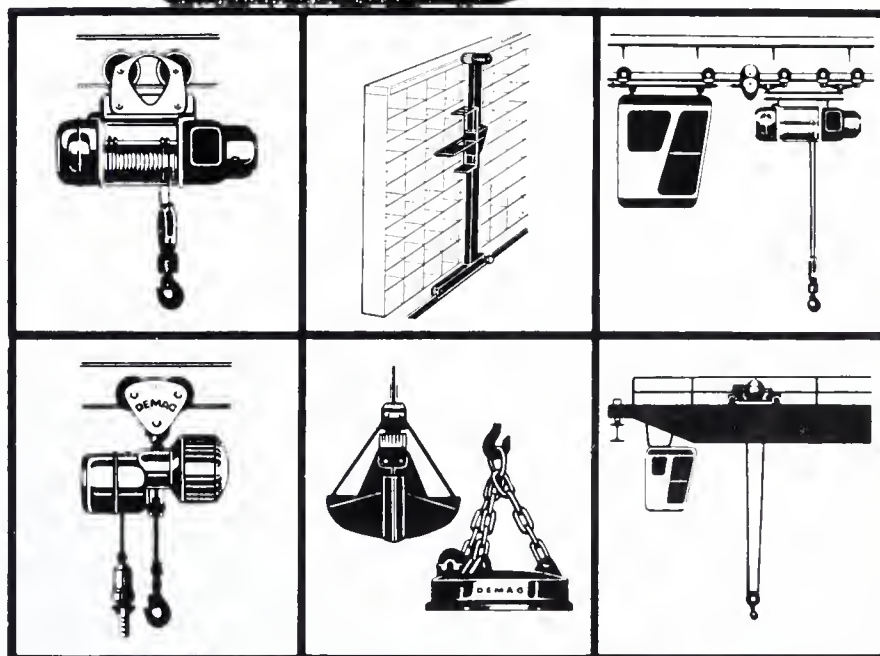
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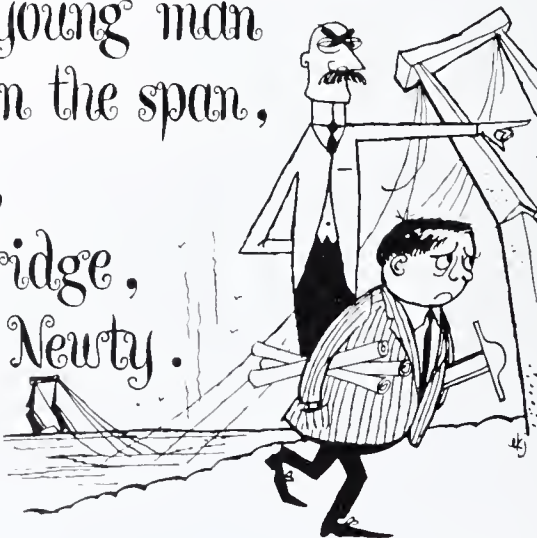
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An Engineer student named Newty,
Constructed a bridge of great beauty,
But a reckless young man
Drove his car on the span,
Down came car,
down came bridge,
down came Newty.

*Penny-wise and dollar-wise,
The student who would like to rise,
Will use this saving stratagem —
A bit each week in the B of M!*

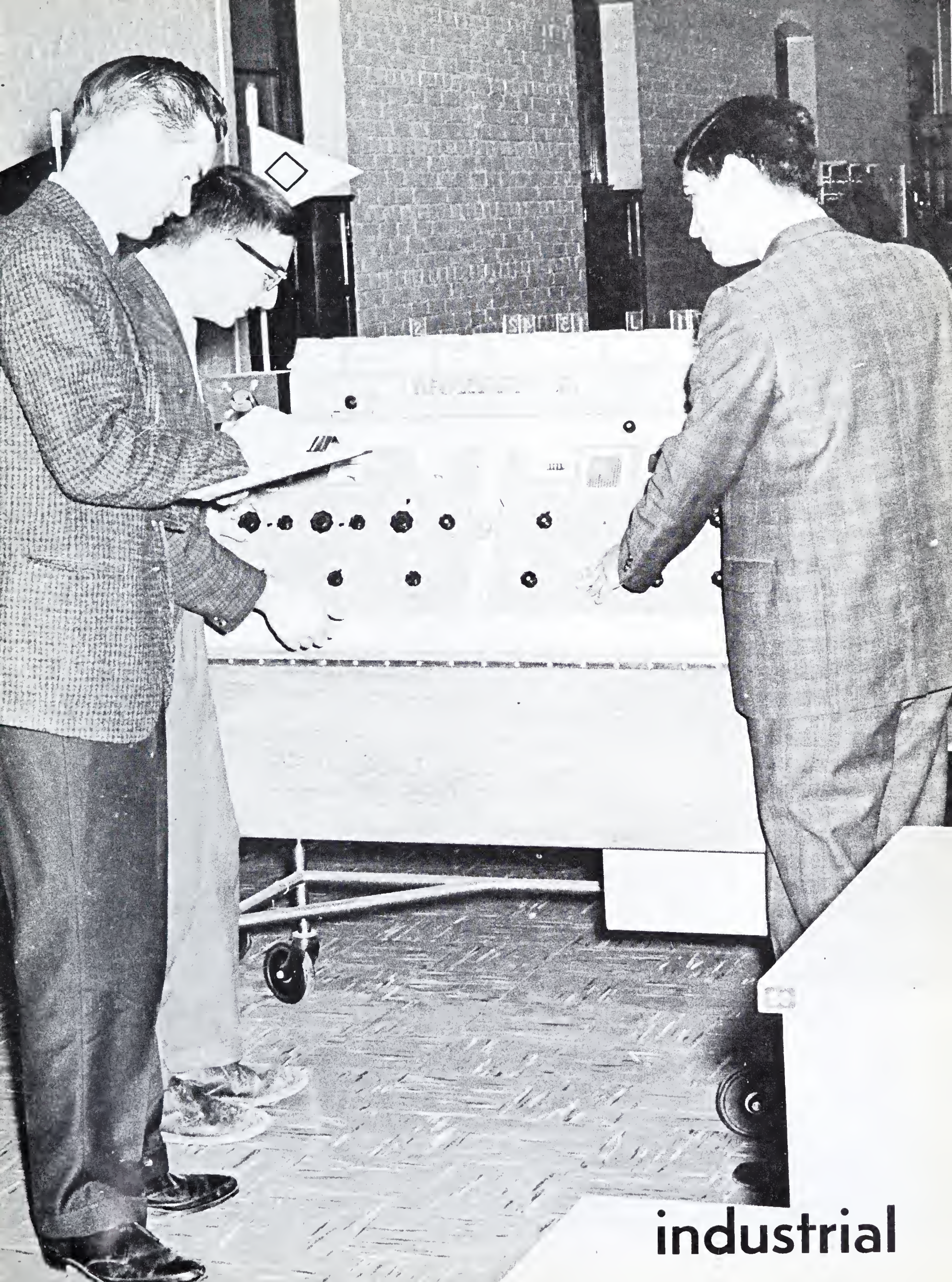


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industrial



... industrial club



FIRST ROW: Pete Evans, Bob Bagby, W. ———, Larry Reeder (author of Ode to Absence); Jim Fenwick, (just about a Playboy Bunny); Doug Stephens, (Stripes and Stripes forever); Rick Cuttle, Ted Milner, (who's bowlegged), Doug Smith.

SECOND ROW: Grant McNab, Dag Furst, John Guppy, Hiawatha; Lee Harmer, whose cook? Ron Arends, X . . .

THIRD ROW: John Martin, Tom Kinsbury, Frank Wrona (only the nose knows), Barry Chapman, Chuck McGaw, I. Gaveup.

FOURTH ROW: Lyle Urquhart, Zohin Handy, John Adare, Art English, Graham Parkinson, Jim Paddy.



I industrial



FIRST ROW: Normon Noumoff, Keith Bowen, Ron Sidon, Rick Ross, Roy Motsunoga, Jim Price, Jerry Bober, Duncon Baird.

SECOND ROW: Bill Boyes, Bill Sceviour, Dennis Tiberius.

THIRD ROW: Ted Romeyn, Ion Chon, Jim Whitehead, Bob Graham, Mike Evons.

FOURTH ROW: John Torry, Steve Wilson, Wayne Dickey.

FIFTH ROW: Wayne Shepherd, Bob Acheson, James Lindsay, Dove Boyle.

SIXTH ROW: Morty Liinve, the class fink.

MISSING: Jeff DAVIS, Ion Campbell, Pete Wilson, Sheldon Berger.





FIRST ROW: Jim Creighton, John Hostings, Tom Howord.

SECOND ROW: Dave Linton, Vic Wozniuk, Dove Tolbot.

THIRD ROW: Glen Greer, Joe Pallos, Bill Campbell, John Phillips.

III industrial



FRONT ROW: G. Skelton, J. Atcheson, F. Edger, M. Mondelboum, R. Evans.

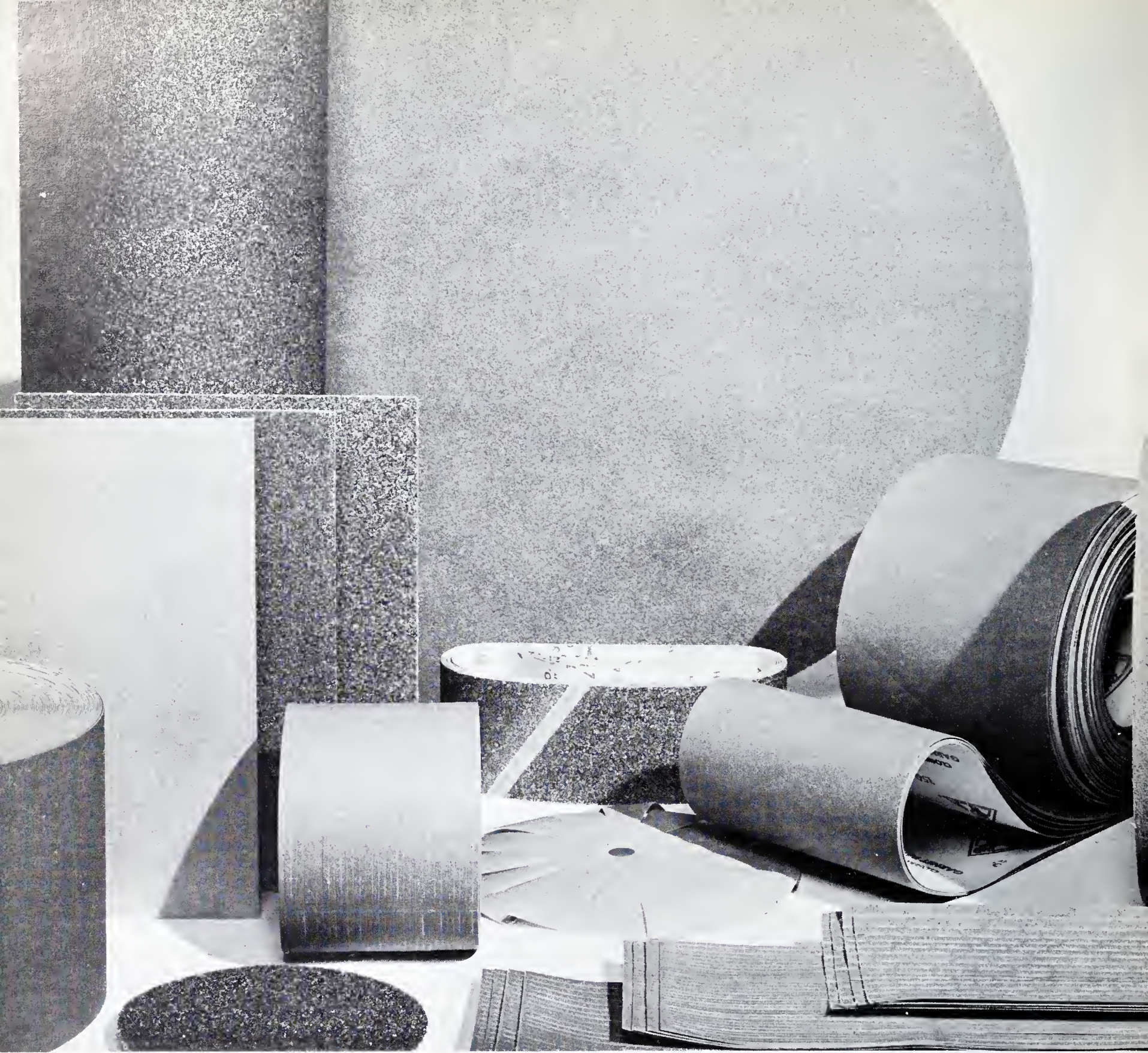
SECOND ROW: R. Jacobs, D. Sodleir, S. Gasner, J. Bell.

THIRD ROW: R. Stymmes, W. Mossie, D. Farmar, A. Price, S. Meslin.

FOURTH ROW: W. Cass, M. Lomoureux, B. Elwood, L. Singer, C. Pringle.

ABSENT: W. Hummel, T. Crowford.

IV industrial



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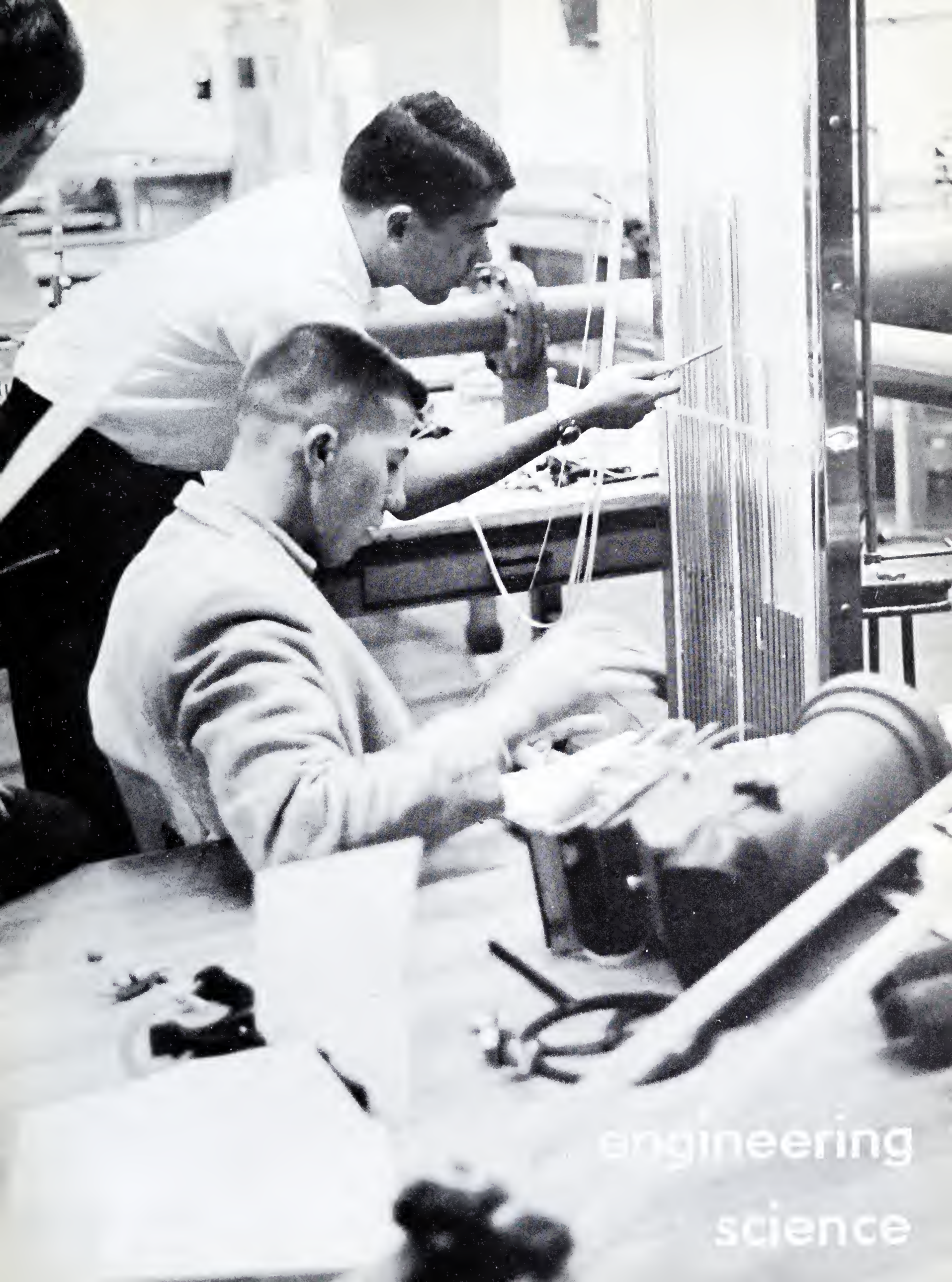
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engineering
science

This year the Eng. Fizz Club didn't do a hell of a lot but I was asked to write a brief sketch of our activities so here are the ones I remember. We had a wiener roast in October which had a big turnout and all had a good time except the beer was warm and John Moore discovered he couldn't mix hot chocolate with V.O.

The fourth year field trip was limited to the American Trip and 12 keeners and Professor V. G. Smith invaded the States in the quest of knowledge. Starting with Kodak in Rochester, the group went to G.E. in Schenectady, M.I.T. Brookhaven, New York City and the Bell Labs. Among other things we learned that Nicholas is a great German Restaurant and the Bamboo Club has Darwin music and built strippers. The Y.M.C.A. in Boston is truly fraternal and the one in Rochester has an IBM 7090 at the registration desk.

The annual dance, the Physical Phrolic, was held annually, as usual, and there was a fair turnout from the upper years. However first and second years evidently have not evolved past self-reproduction as very few showed up with dates. Future events include a dinner with guest speaker Dr. P.A.M. Dirac and an evening meeting including a lecture by Professor E. Teller on atoms for peace.



**engineering
science club**



5₁

FRONT ROW: D. Jani, K. Chan, I. Hughes, R. Bales, A. Kaplan, V. Korsik, G. Heycho.

SECOND ROW: Half hidden, A. Haasz, P. Hiscocks, Paul Johnston, P. Baldwin, X. Chicaine, R. Ens.

THIRD ROW: J. Gillespie, R. Codie, D. Dowell, E. Aiss, D. Granatstein, P. Bateman, D. Gauthier, C. Bouten, B. Jurros, W. Jeffrey, G. Balleaeg.

FOURTH ROW: B. Madott, W. Gentles, X. Landstrom, R. Charney, K. Cook, D. Fort, P. Donner, A. Emmet.

FIFTH ROW: E. Dan, S. Fajar, N. Hogg, W. Dodd, P. Crawhurst.

LAST ROW: Missdrik, B. Homonick, L. Garred, J. Allen, J. Gardner, A. Voher.



5₂

FIRST ROW: ?, R. Piercy, W. Martin, Partington, D. T. Scott, A. Vahar, B. Toogood, J. F. Martin.

SECOND ROW: B. Sauermann, M. Milgram, R. Patterson, H. Teunissen, Laconte.

THIRD ROW: V. Naumetz, J. Schnorrer, (who wrote this mess), A. Snipe, R. Sheply, L. Stinson, T. Southwood, D. Skrinkas, B. Tenent, K. Petersen.

FOURTH ROW: J. Tulk, R. McCullough, W. Ng, B. Rieger, T. C. Leijng.

FIFTH ROW: A. Mudcick, G. Williamson, P. T. Rowe, R. G. Schoenaich-Peters, D. Mallenby, U. Priller, M. McKinney, A. Slavin.

I eng. sci.



FIRST ROW: M. Asner, W. J. Knapp, R. Caven, E. Fudurich, E. Sarafian, H. Goldberg.

SECOND ROW: J. F. Ross, P. W. T. Long, G. J. Goller, Y. Y. Dong, C. L. M. Stoute.

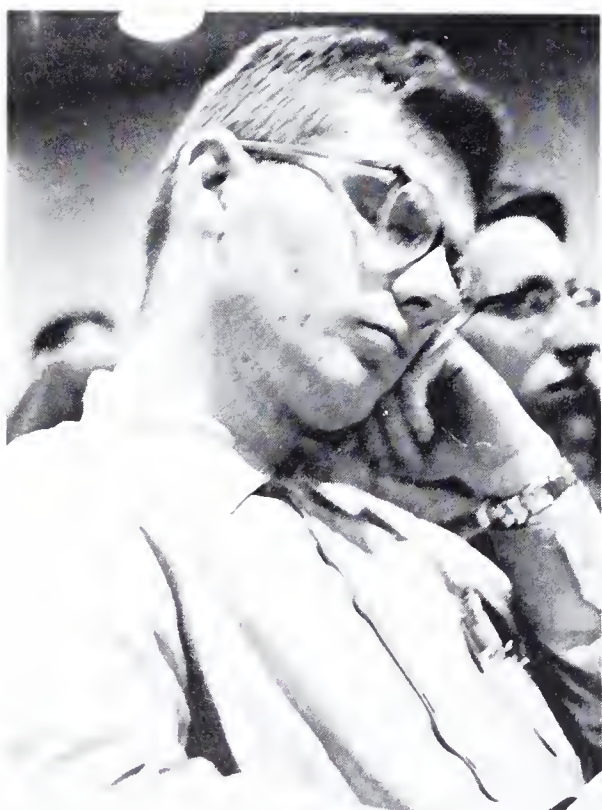
THIRD ROW: W. F. H. Micklethwaite, F. V. Bucciarelli, P. C. MacNaughton, D. Fraser, R. D. Wevers, M. G. McLeod.

FOURTH ROW: A. Skuja, A. Cappell, P. S. Saltzman, I. W. Thompson, J. B. F. Cripps, H. S. White.

FIFTH ROW: J. W. B. Hill, C. H. Her-som, R. J. M. Campbell, R. J. Buchan, O. A. Kupcis, C. A. King.

LAST ROW: G. I. Nunn, J. H. Chalmers.

ABSENT: P. Collier, D. S. Done, A. D. Pelton, T. F. Balsa, H. Banks, A. Birnbaum, W. R. Buckley, J. A. Courtney, S. Feuer, S. Gewurtz, F. S. Harris, D. J. L. Hawkins, A. K. Mackworth, A. Melling, J. J. Menzel, W. A. Newman, R. S. Omylanowski, C. E. Pyke, J. A. Rayfield, F. H. Rooke, H. J. Smirmaul.



II engineering science



FIRST ROW: U. Ackermann, K. Ng, M. Goldberg, J. Kamin, N. Ferguson, G. Faygel.

SECOND ROW: M. Bayliss, W. Graber, J. Boyd, Ray Amolins, K. Cowan.

THIRD ROW: B. Murakami, P. Didn't-conquersogood, K. Bragg.

FOURTH ROW: M. Morris, B. Selvage, S. MacEwen, C. Simpson, I. MacPreson.

FIFTH ROW: W. Rosocha, B. Greiner, H. Ing, W. Karvonen.

ABSENT: All those whom we have kept merely for the sake of contrast.

III eng. sci.



FRONT ROW: J. Zaleski, B. Kenyon, K. Shultis & Friend, L. Reed, B. Ure, L. Saunders.

SECOND ROW: L. Bradfield, T. Thompson, D. Ferrence, U. Thiede, T. Griffith, J. Pilcher, J. Joule.

THIRD ROW: D. Coultis, Q. Briefcase, B. Kerighan, J. Wright, N. Ellis, D. Turner, A. Fink.

FOURTH & FIFTH ROWS: Assorted derelicts and clots from other Engineering courses.

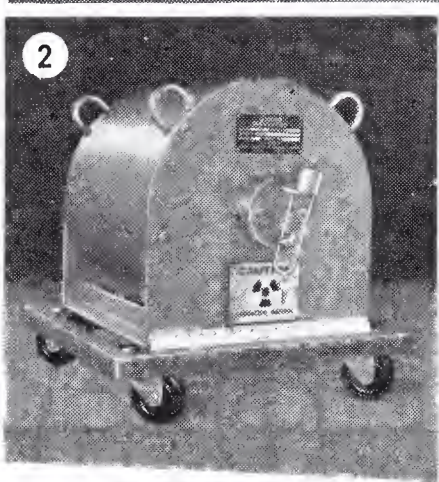
IV eng. sci.

weldcaps

the heart of any irradiator



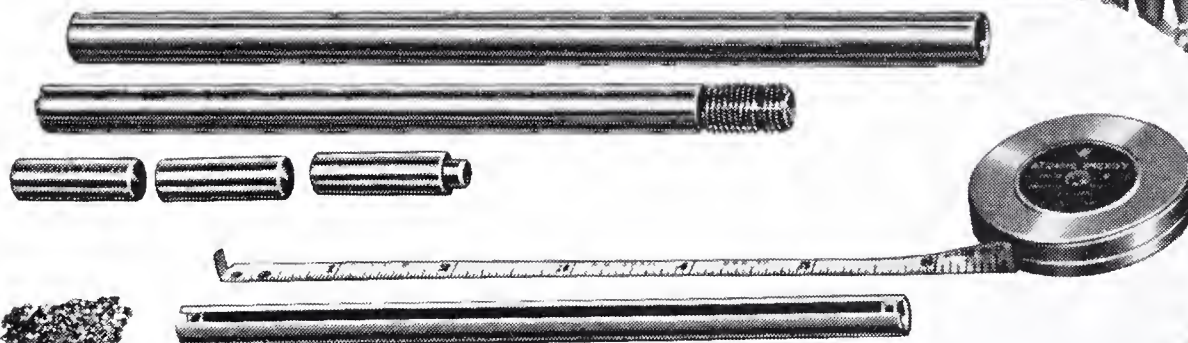
1



2



3



Cobalt 60
Pellets

Weldcaps — versatile stainless steel capsules

AECL's large selection of standard
and custom built

cobalt 60 irradiators

using the versatile WELDCAP
double-welded stainless steel cap-
sules, broadens the range of prac-
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is available to you — Please write,
attention CONSULTING SERVICES

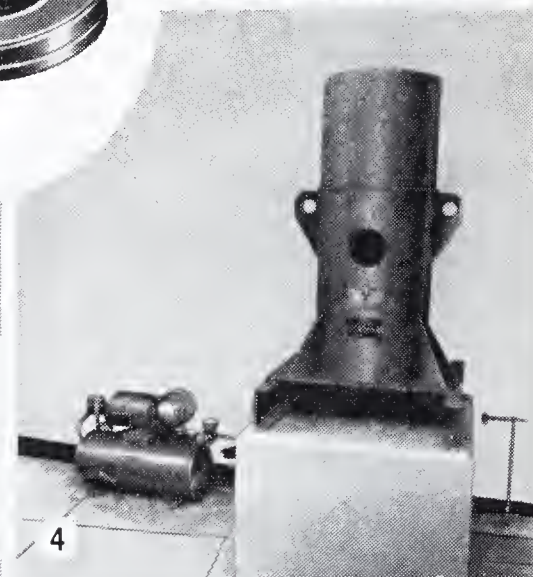


ATOMIC ENERGY OF CANADA LIMITED

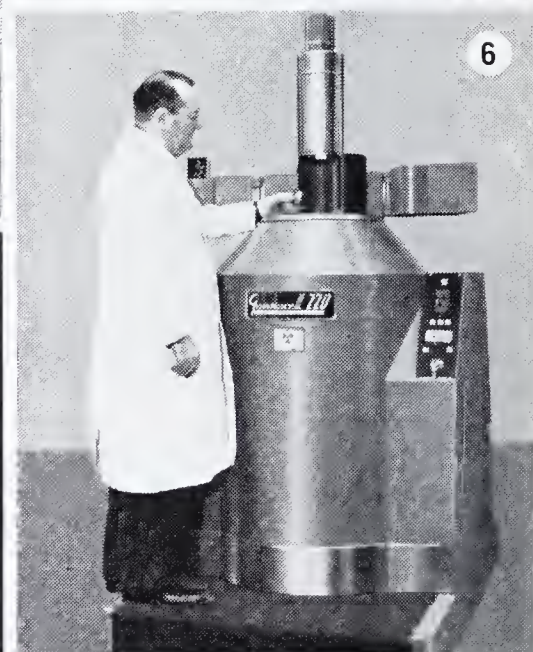
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5

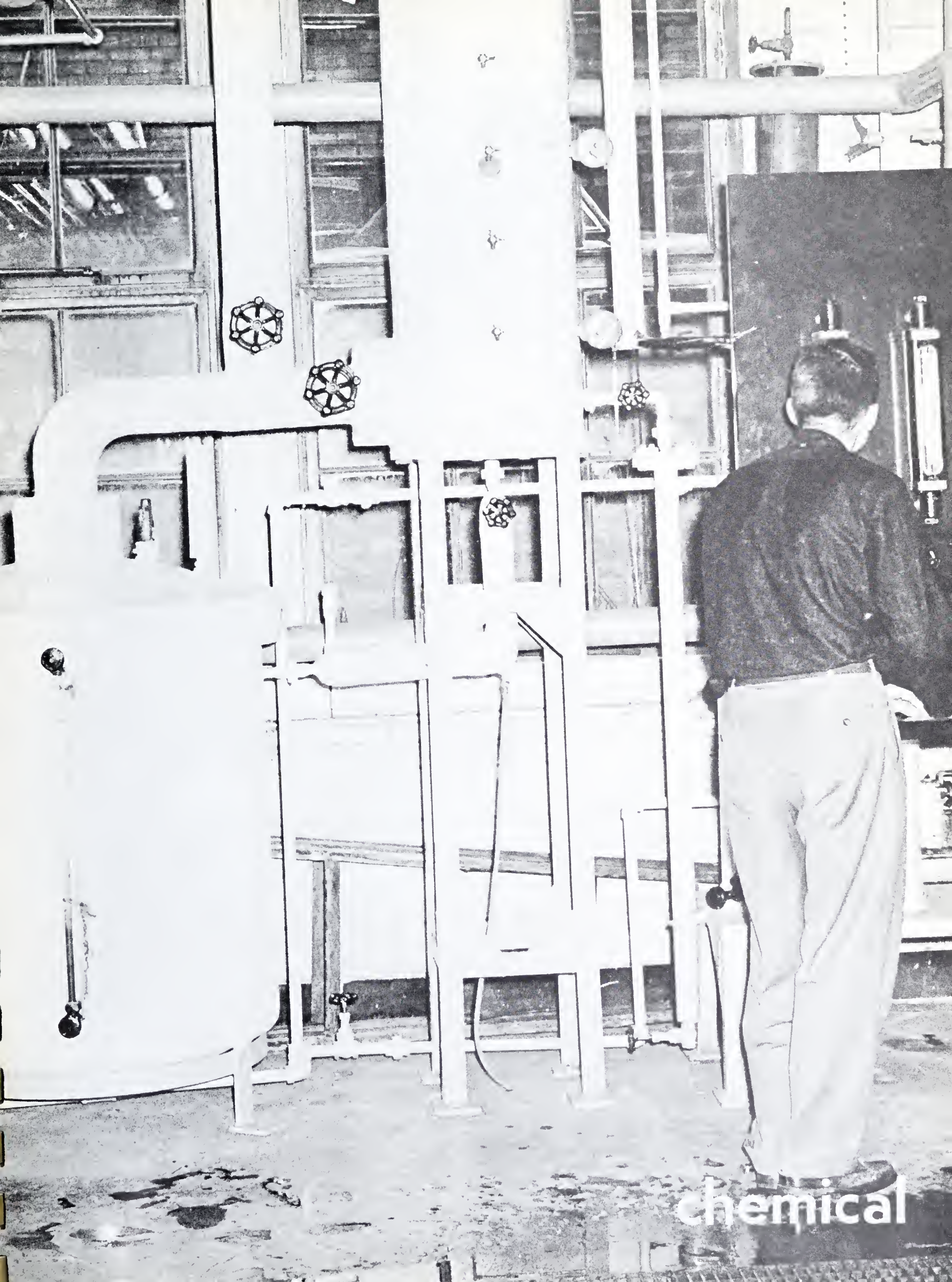


4



6

1. Mobile — Self Contained
2. Special Beam
3. Panoramic, in use
4. Beam
5. Beam
6. Self Contained
Standard Unit



chemical

As usual the club has successfully performed the large number of traditions which were started in the year 1 and steadily improved upon.

To begin, it is important that we find the beginning. Let us pick a date—say the 25th of September. It is on this date that history was made. Through the smog filled halls of the Wallberg Building came a horde of first year refugees, all 120 of them. This mass of humanity was given a tour through our magnificent edifice and treated later to a dinner in the Great Hall.

The fall dinner which was held at the Town and Country was a raging hit mainly due to the fact that we were entertained by a trained professional circus act. The rumour, that Professor Graydon is practising a new act for next year — a high dive into a pot of boiling vodka, has been verified by the stores-keeper.

Our second annual open house proved to be a coup de maitre. Here Bill Winslow and his boys really showed their superior ability. While achieving twice the attendance over the previous year, they only expended three times the energy.

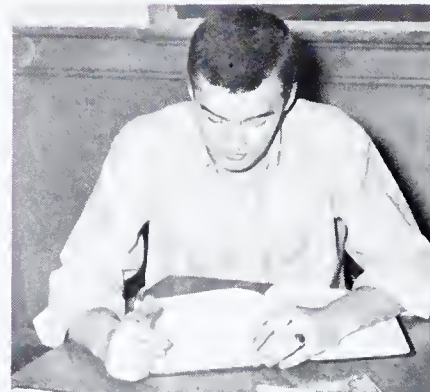
Paul Dickie and his masterful aids — Ed Flis and his Madison Avenue Boys, Frank Brenchley and Hugh Hawthorne attached the problem of obtaining handfuls of nurses for our annual Turtle Trot with much vigour. The fervour created is believed to have direct bearing on the fact that the truck load of nurses were in a state of shock at the prospect of finally meeting some real men — Chemical Engineers.

Poisonous red lead and fearless thousands proved to be the deciding factor in the Chariot Race. Again, we won. Three years — eh!

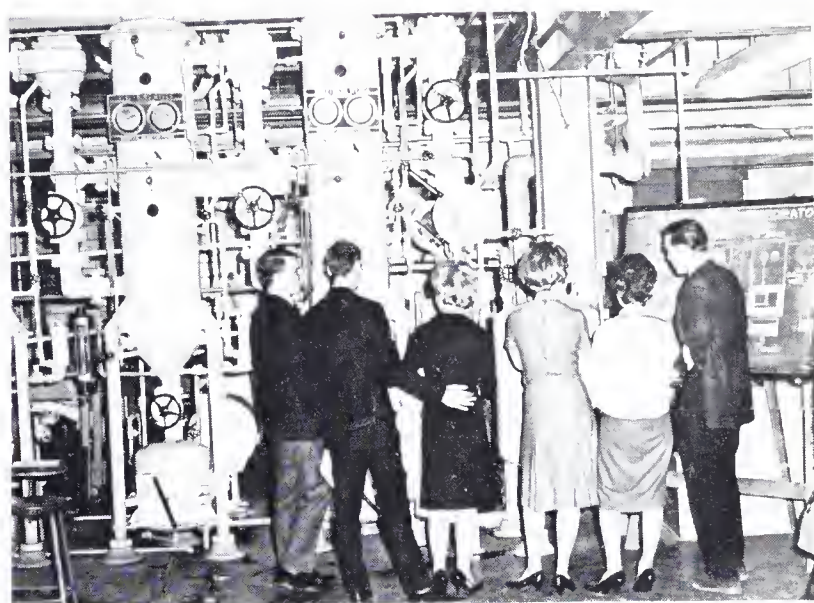
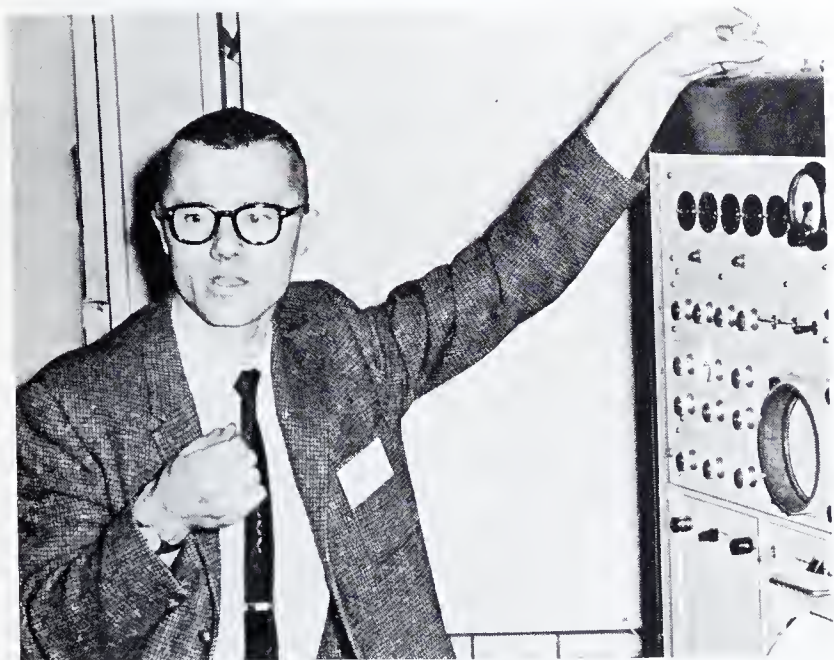
The hockey tournament was decided in a bloodless battle between second and fourth year. The narrow victors second year: 2-1.

Special thanks are due to Bill Winslow, a hard-hitting, watchful, honest and cheap treasurer.

Thanks also to: the class reps for their faith in human nature; to you people for your wonderful support; making our work worthwhile; the coke machine — I love you.



chemical club



chemical club open house



6e

More Anonymous Types



6f

FRONT ROW: R. Stahera, E. Shapka, R. Stim-
ming, Z. Zongor, B. Wilson, B. Malauin, D.
Lynch, A. Lee.

SECOND ROW: H. McCormick, J. Patte, P.
Ostrowski, C. Smith, R. Luscombe, R. McCor-
mack, L. Orsan, J. Merber.

THRD ROW: F. Usher, A. Shirley, D. Sadoski,
D. Sakai, G. Zwaigenbaum, B. Osatchuck, D.
Medued, J. Walton, P. McDermott, R. Weir.

FOURTH ROW: D. Wilson, A. Wyner, D.
Marek, G. McNally, P. Shirley, T. Orav, T.
Onna.

I chemical



FRONT ROW: Ray Sanders, Russ MacDonald, Eugene
Ibe, John Brennan, Doug MacDonald, Gord Thampson,
Brian Stanyon.

SECOND ROW: Larry Seeley, Wayne McMacken, Nick
Austen, Bernie Coyle, Tom Galla, Ernie Thamm, Frank
Dixon, Ron Stevens.

THIRD ROW: Paul Jahnston, Dave Matsunaga, Frank
Simons, Roy Patterson, Hugh Hawthorne, Larne Sequin,
Doug Burnett, Jeff Shimotakahara.

FOURTH ROW: Marty Vagners, John Osborne, Paul
Voyt, Ted Kamad, Mike Doucette, Eberhard Kluchert,
Jim Higgins.

FIFTH ROW: Al Naganolu, Alex Giffen, Danny Kit,
Dough Wilson, Jim Howard, Ed Malec, Kaliv Kuutan,
Brian Tyers, Cliff Wintemute, Gerry Zarnett.

SIXTH ROW: Bill Eng, John Pullam, Levente Drasady,
John Kerr, Pete Wheatstane-Bridge, Paul Dodgson, Paul
Dickie, Bill Carrigan.

SEVENTH ROW: Masood Akber, William Demi-Dowkes,
Aldo Shirmich.

II chemical



FIRST ROW: Frank Foulkes, Jones Lem, Sandy McDowall, Jim Chambers, Dale Cunningham, John Adam, Haroon Solomat.

SECOND ROW: George Pengelley, Joe Paradi, Jim Tookey, Dave Pugsley, John King, Don Alton.

THIRD ROW: Gary Walter, Dave Kemp, John Killer, Greg McCormack, Vello Tou, Don Andrews, Larry McMillan, Bob Brinkman, Zali Ganyu, Boris Boyko.

FOURTH ROW: Frank Brenchley, Dave Hagopian, Phil Thomas, Grant Leishman, Roy Monohan, A. Caero, Michael Zell.

FIFTH ROW: Dennis Springle, Dave King, Peter Nuk, Bill Bobbs.

SIXTH ROW: Bill Winsloe and Friends.
UPPER RIGHT CORNER: Eno Jokipii.

III chemical



FIRST ROW: Carl Gryte, Howie Goodfellow, Ted Tuszynski, Garry Zone, Y. Y. Spolsky.

SECOND ROW: Norm Huebel, Bob Pirie, Louis Allore, Ed Sandolowich, W. Reznicek.

THIRD ROW: —? —, Frederick Ho, Peter Breikss, Bill Papailais.

FOURTH ROW: —? —, Andy Gwenda, Jack Brannigan.

ROW FIVE, SIX, SEVEN, EIGHT, ETC.: Jim Morwick, Dale Hagerman, Davor Fisher, Dennis McKee, Mike Wray, Geo. McLeish, Don Skelton, Ian Munro, Nare Borodozak, Peter Kuuter, Vic Niemala, Pete Beynon.

OTHER MEMBERS IN PICTURE ? ? ? ? ?
(Thanks, people).

IV chemical

WHERE DO YOU GO FROM HERE?



As an engineering graduate, your first step will be important. Perhaps the most important of your career. You have to decide where the best opportunities lie . . . where you can best use your talents.

Du Pont of Canada offers many opportunities. Operations are diversified to the point where there is scope for graduates in all branches of Engineering.

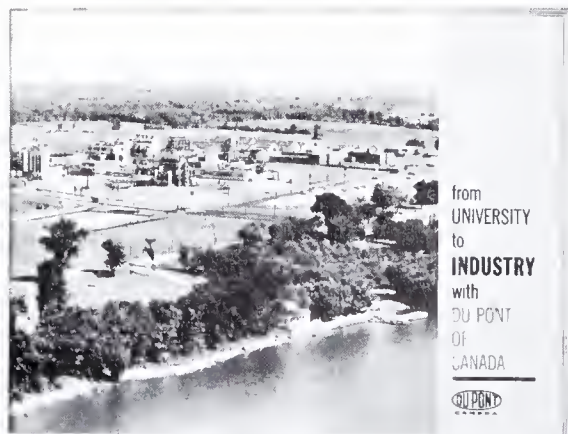
Here are some pertinent facts about the company:

GROWTH: In the past nine years staff has increased more than 50%. From four plants in 1954, we now have eleven. This growth is reflected, more than adequately, in sales figures which have grown from \$55.7 to \$146.0 million during this same period. And, over \$20 million are now committed for new and enlarged production facilities.

OPPORTUNITY: Du Pont is a leader in sound growth . . . a pace-setter in research, technology, product development, marketing.

Intensive search for new and better materials is coupled with a willingness to take the sizeable risks involved in launching new products. This is a great challenge to people's skills, knowledge and experience. We believe that within the next twelve years at least 60% of our sales revenue will come from two particular sources: products now being developed and products *not yet even conceived!*

And so the door of opportunity is wide open. The more we expand, the more we *need* trained people in our six major fields of research and development.



To give you a more complete idea of the Du Pont of Canada organization, we'd like to send you our booklet—"From University to Industry". It tells the story of Du Pont . . . its products . . . its plants . . . its people . . . its opportunities.

Send for your copy today.

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Personnel Division, Room A,
Box 660,
Montreal 3, Quebec





electrical

It came to pass that the king of the people of the god Electros sent envoys to the provinces of his land telling them of a great council. From all of the provinces they came to the council, Benzaquen and Smith of the first province, Vallo and Lundgren of the second. From the third came Myers and Midgely and from the fourth and greatest of the provinces came Crossan and Shaw. This council decreed that a festival would take place on the Isle of Toronto at the end of the tenth month.

Rejoicing after the great victories of the invaders in the third week of the twelfth month the council decreed that a tournament of blades and sticks would take place during the second week of the first month of the next year. Ac-

cordingly on the fifth day of the second week athletes from all of the provinces met in the arena at Varsity.

In preparation for the tournament great offerings were made to the spirits of Walkers and McGuinness, to O'Keefe and to many others. Electros saw this and he was angry. He sent a darkness upon the land and destroyed the tournament.

To atone for their heinous sin the people constructed a marvelous chariot in offering to Electros. It is said that when the chariot was taken to the race of all the civilized world, that He rode in the chariot causing it to become the colour of the risen sun smiting any alien that touched it.



electrical club



7g

FRONT ROW: John Dunlop, Barry Anderson, Guy Campbell, Jim L. Bagshaw, Alex Husick, David Kanakas, M. L. Belusa, Bob Horne, Paul Diakoluka.

SECOND ROW: Ed Bogdanowicz, Gary Bryckar, Geaff. Barr, W. Bates, W. Darmaga, Fred Benzaquen, Bill Cripps, Vic Henderson.

THIRD ROW: Gerald Bergin, Roy Brushett, J. Hager, Fraser Dunford, Russ Brown, Mike A. Chappelle, Fred Axnick, R. Griffin, Frank Ciacci, Roger Bywater, Gary Ball, Bill Cripps (again), Larry Forster.

FOURTH ROW: David Hardisty, Bob Allen, Richard Kenno, Kastytis Batura.

LAST ROW: J. W. Hamilton, Allen Dick.

SENT ON VARIOUS DUTIES: Paul Aeberli, Paul Bjurkstrand, W. R. Cansfield, Mike "Fidel" Ciric, Robert Donn, Ed Doucet, Mark Gercke, G. H. Iles, Georges Irwin, Brian Kelly, H. C. Kwan, J. Cross.



7h

FRONT ROW: Ian Mackintosh.

SECOND ROW: Derek Lund, Mari-
anne Sarnecki, Don Mahoney.

THIRD ROW: Tony Wilshire, Ron
Osborne, Willy Piersol.

FOURTH ROW: Yarko Malkewyth,
Ken Leper, Steve Ward, Cliff Pat-
terson.

FIFTH ROW: Ray Poulton, John
Rizk, J. G. Smith IV-1/2, Les Bagel,
Rod Woode.

MISSING: n+1 studious finks!

I electrical



FIRST ROW: Stefan X. Shader (who has a cannon), Class Mistress (who has what all engineers want), BSA Scooter (who gets him where he gets).

SECOND ROW: Gord Hines, Ron Weese, Joe Zorn (alias Valachi) Helmut Brosz, Dave Kerfoot (who wrote this mess), Tony DiPaola, Lionel Burns, Ollie Cajanek, Gerrard Papazian.

THIRD ROW: Martin Mallek, hole, Dulio Gemmati, Nobby Kamitakahara, Serge Moiseev, George Watson, Mike Lundgren (rep), hole, Russ Jones.

FOURTH ROW: Rainer Bienhaus (alias Zeibur), Norm Fisher, Glenn Cockwell, Brian Hamilton, Gary Closson, Tony Eiranova, Roy Northover, Wayne Rogers.

FIFTH ROW: Ted Zimmermann, Pete Weaver, Mike Gain, Vladimir Gretchev, Gary Thornton, Bruce Mathewson, Fink, Les Segal (nee Bagel), Frank Vallo (rep), Al Raftis, Brian (King) Cole.

SIXTH ROW: Mati Lehela, Aser Niiholm, Pete Wroldsen, Fred Tomes, Rudy Voytek (who is nearly obliterated by Thornton), Keith Sabine, Vic Luukkonen, Larry Maki, Dan Perco, Bill Walters.

SEVENTH ROW: Errol Porter, Hans Peters, Deitmar Koslowski, hole, Eric Livermore, Jim Lougheed, Stan Hiraki.

EIGHTH ROW: Jasper Lochner, Bob Marshall, Jim McCleod, Matti Gering, Ants Kahu, John Hogeboom, hole, Bill Johnson.

NINTH ROW: Hans Modlich, Urmas Sui, Larry Folliot, Juri Vosu, Ed Grezik, John Partington, Fink, Lloyd Burns, Fink

A.W.O.L.: Harvey Snider, (with smelly pipe), Gabor Benzak, Jim Allison, John Knowles, Matti Tuvikene, Barry Hyndman, George Lewis, Bob Rendall, Dino Poretta, George Seman, Al Pateman, Eric Seppala.



relaxing . . .

II electrical



FIRST ROW: Nick Tomory, Bob Dyer, Ray Tse, Laurie Kochen, Bab Morris, Dave Morrison.

SECOND ROW: George Keintzman, Gert Gevaert, Gary Rogers, Larry Hatt, Joe Kerti, Juriz Lysiak, Howard Lee.

THIRD ROW: Gord Wigle, Verne Chant, Bob Jones, Laurie Hiivala, Pete Beran, Tim Kreutzer.

FOURTH ROW: Tom Moolecherry, Rick Buchanan, Al Holt, Bill Bacon, Gary Cooper, Bob Winterton, Ray Chow, Jim Farsythe, Pete Stern, Bill Myers.

FIFTH ROW: Ernie Black, John Giecka, Pete Lawrence, Don Bevis, Doug Williams, Angela Mancini, Sexy Lloyd Smith.

SIXTH ROW: Gord Tanaka, Al Seggie, John Westlake, Roger Midgley.

III electrical



FRONT ROW: M. Korostil, B. Ready, J. Mindel, B. Roi.

SECOND ROW: J. Alexander, S. Ben-Aire, D. Hawkes, T. Kowalski, B. Chappel.

THIRD ROW: D. McLean, T. Woolhouse, P. Benedict, S. Wong, E. Egbuson, D. Boucher.

FOURTH ROW: M. Stewart, E. Jurus, O. Benz, J. Chattoe.

FIFTH ROW: B. Parnes, R. Gardner, N. Kully, P. Tamory.

SIXTH ROW: G. Abrahamson, J. Schallenberg, B. Bustran, D. Guntan, J. Hood.

SEVENTH ROW: E. Marsden, P. Nelson, D. Ichii, D. Botting, J. Scanlon, G. Marcus, M. Sendecy, T. Rusnov, R. Brown.

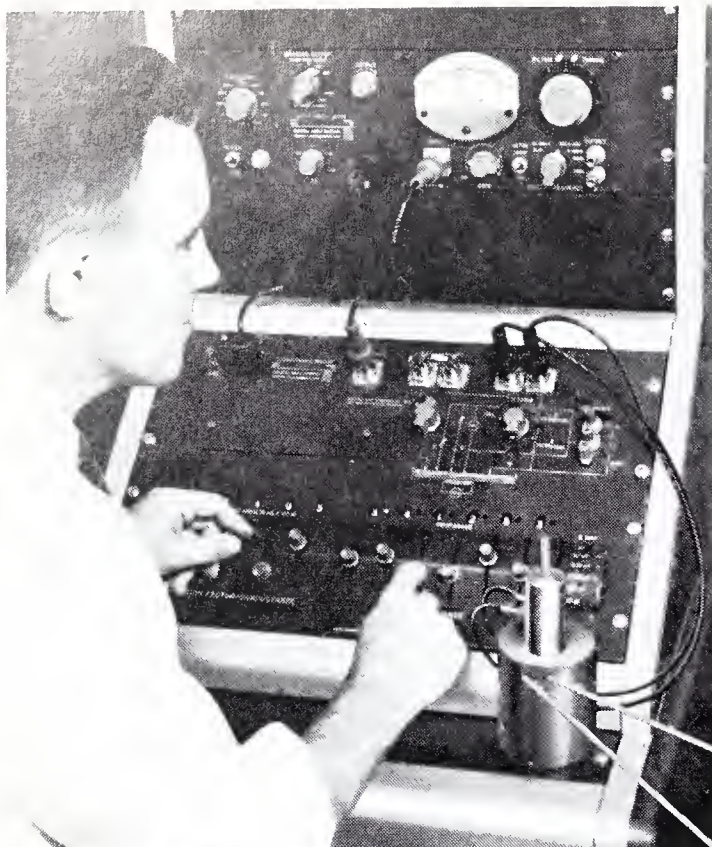
IN BACK: P. Hanish, B. Shaw, D. Brennan, V. Smiltneks, M. Dimmick, A. Randsalu, J. Cashmir.

AWOL: Ed LaHay.

STILL EN ROUTE: J. A. Gibson, J. G. D. Crookston.

Photo by Bob Shaw.

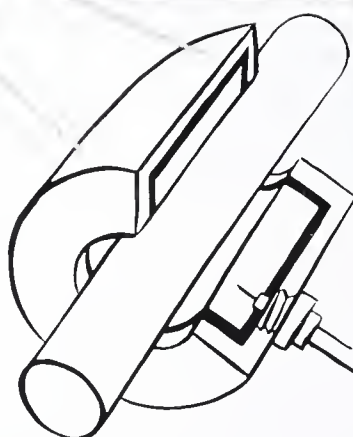
IV electrical



How to Measure Millionths of an Inch

PROBLEM – how to maintain a tight tolerance on a 0.24425" dia. rod used in a precision coaxial connector.

SOLUTION – a precision capacitance bridge and simple jig designed as a 3-terminal coaxial capacitor. The jig's center conductor is removable and has the same shape as the rod to be measured.



First the bridge is balanced. Then, the "standard" center-conductor rod in the jig is pulled out and replaced by a production-made center conductor. The difference between the average diameters of the two rods produces a proportional unbalance of the bridge which is sensed by a null detector calibrated to read the deviation directly in microinches. The entire measurement takes less than 30 seconds.

This system has an accuracy of better than ± 10 millionths of an inch. Differences as small as one millionth can readily be seen on the detector's meter scale.

How do you get such accuracy? Basically, it is a result of the precision and stability built into the Type 1615-A Capacitance Bridge. This Bridge is capable of measurements to six significant figures over a one-microfarad to one-picofarad (10^{-12} farad) range. It is capable of detecting a capacitance change as small as ten attofarads (10^{-17} farad). Its precision internal standards are constructed of Invar alloy and are hermetically sealed in dry nitrogen gas.

This Bridge, used widely in electrical standardization laboratories, is priced at \$1475. If you would like more information, please write.

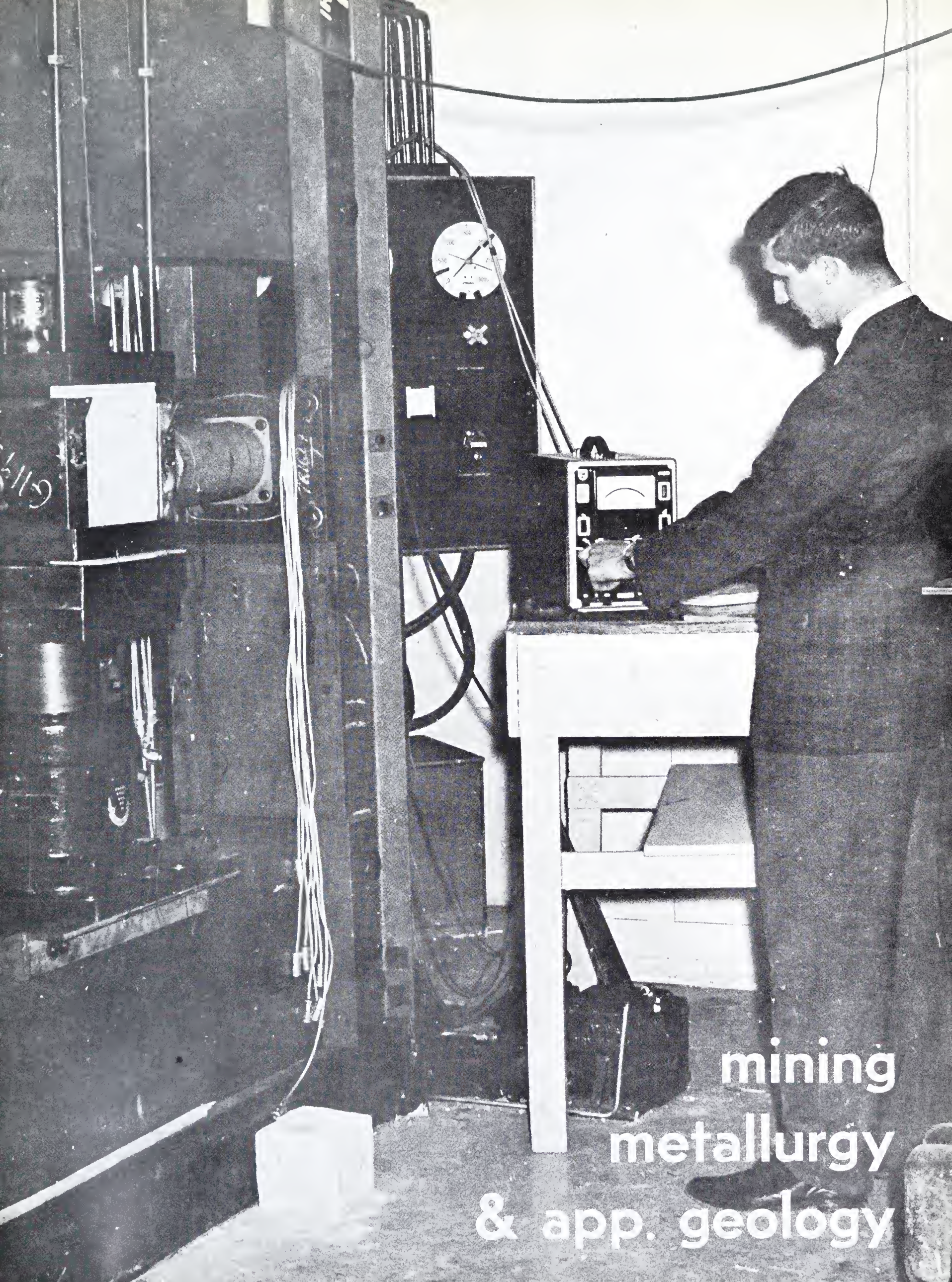
The precision Coaxial Connector referred to above is the General Radio Type 900-BT, the finest High Frequency Connector available.

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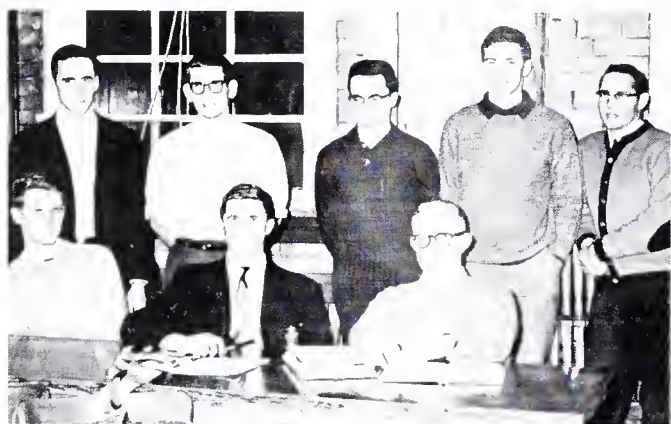


mining
metallurgy
& app. geology

This year the old Mining and Metallurgy Club received a new status to its title. Before the ink was dry on the original draft of the Club's Constitution the Geologists were clamouring for recognition and this year they have been appeased. The Engineering Society now recognizes the new Mining, Metallurgy and Geology Club. It was suggested with all respect to the Metallurgists that the club be named the Mining, Geology, and Metallurgy Club or the M.G.M. Club. This was unanimously vetoed since name stealing in the industry which bears the same label is a capital offense and the plagiarist is subject to rather heavy monetary fines. After showing a profit last year of \$2.50 the legal fees could not be sufficiently covered.

The Club is fortunate this year to have as its Honourary Chairman, Mr. V. C. Wansbrough, the Executive Vice-President of the Canadian Metal Mining Association. Mr. Wansbrough was the guest on the occasion of the Club's First General Meeting at Hart House where he delivered a talk on "Education in the Mineral Industry."

David Jolley
CHAIRMAN



m.m. & g. club



LEFT TO RIGHT: Grant Paterson,
Erik Randmaa, Richard Car-
michael, A. J. Kurtis, Bill Winkler,
Bill Coome, Nick Moskaluk.

ABSENT: Howard Nakamura.

I metallurgy



LEFT TO RIGHT: R. A. G. Ten-
bergen, J. P. Parry, P. Stepanek,
A. L. Barker, H. C. Manuell, J. S.
Griffiths, T. L. Bedard, D. B. Lang.

ABSENT: F. Wang, G. Watts, R.
McGinn, J. K. Carrington.

II geology



II metallurgy



II mining

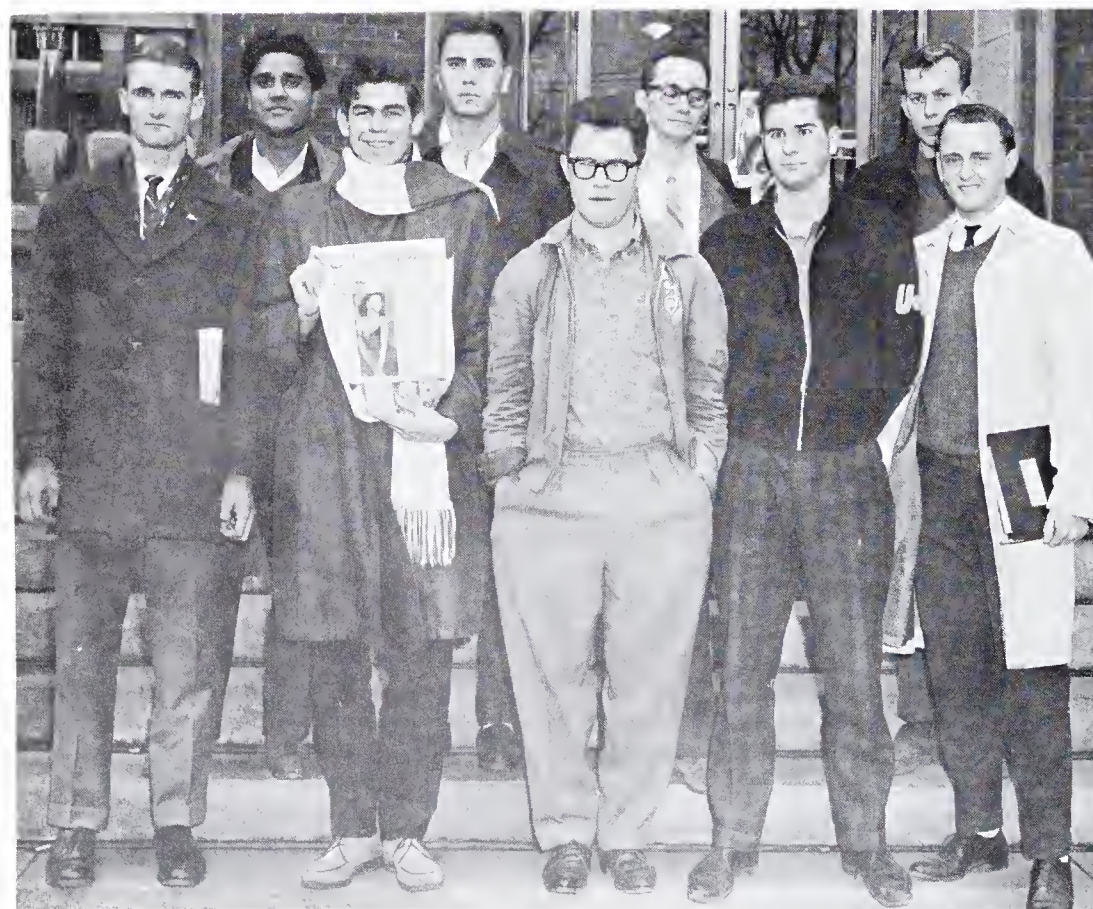


FRONT ROW: T. Beesley, R. Griffis, A. Betmonn.

BACK ROW: J. Ronson, L. Tigert, J. Romsden.

ABSENT: W. Jackson, J. Adamson, P. Kaynes, T. Rotnik, D. Scott, and III Metallurgy.

III mining & geology



FRONT ROW: Mike Pullen, Roly Ridler, A. Kucherski, Ted Coulter, Phil Taylor.

BACK ROW: Romesh Mandal, Joe Fulop, Jim Skeoff, Peter Pint.

MISSING: Dovid Jolley, Jim Welmsley, Dove Morsholl, Dunc Wilkins, Cuchorski.

IV min., met. & geology



This is a plug for our products.

Most people know Frigidaire from our quality line of refrigerators and other home appliances. We also make an impressive range of air-conditioning and refrigeration units for commercial applications.

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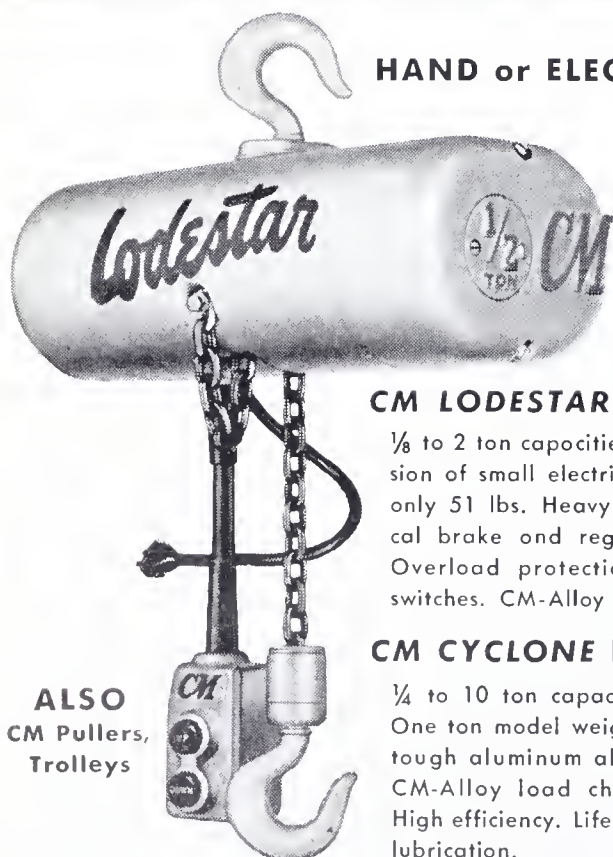


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1/2 to 5 ton capacities—Compact, enclosed design. Low headroom. Continuous hoist-duty motor with thermal overload protection for heavy duty service. Precision bearings and helical gears for long life. Only 110 volts at push button control.

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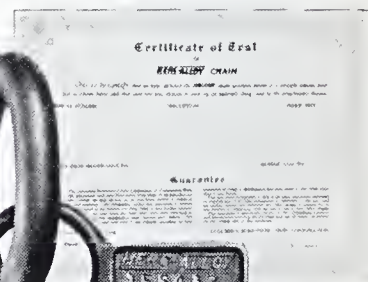


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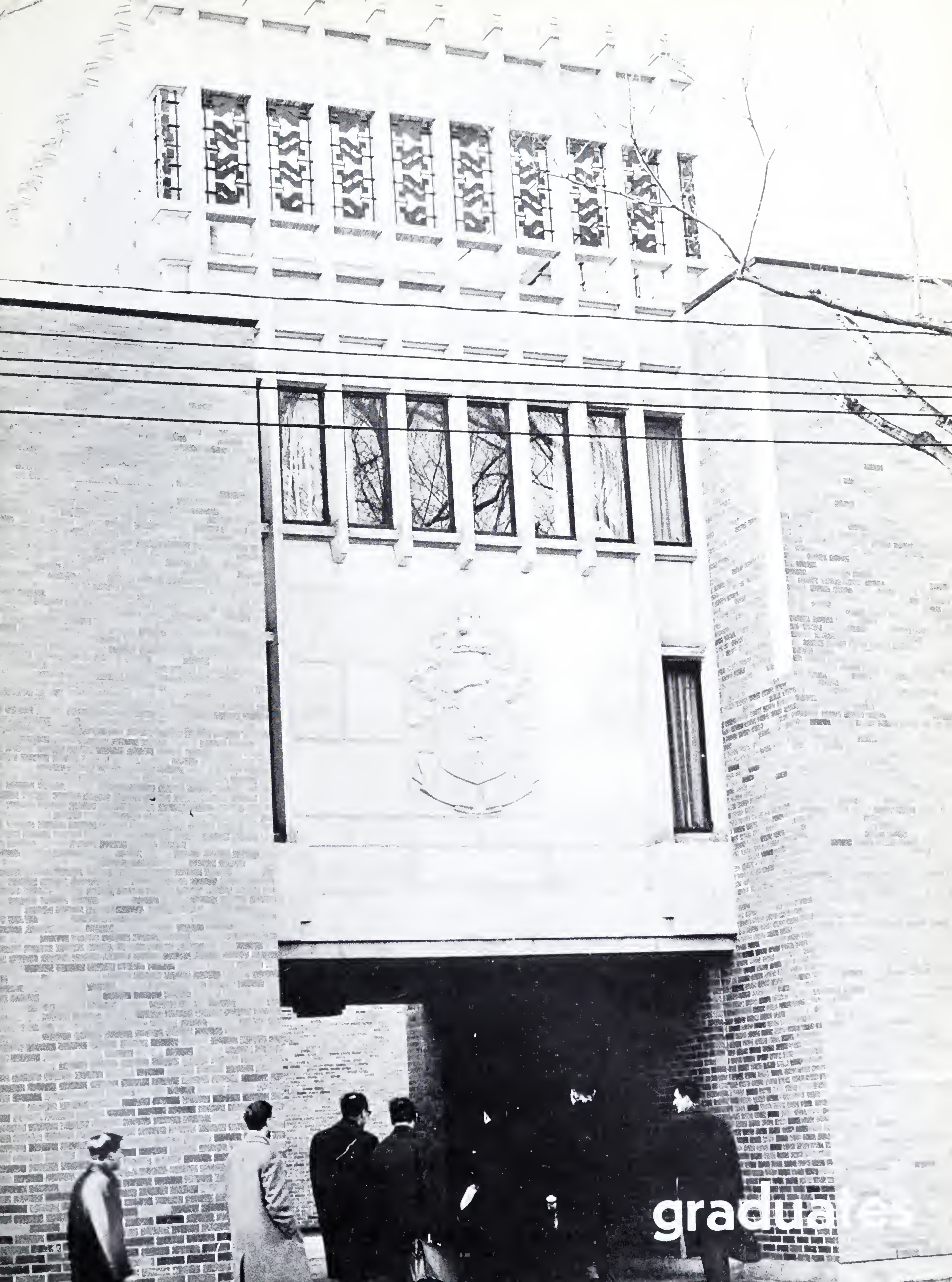


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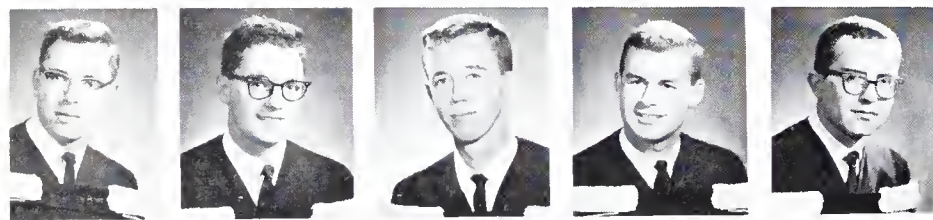


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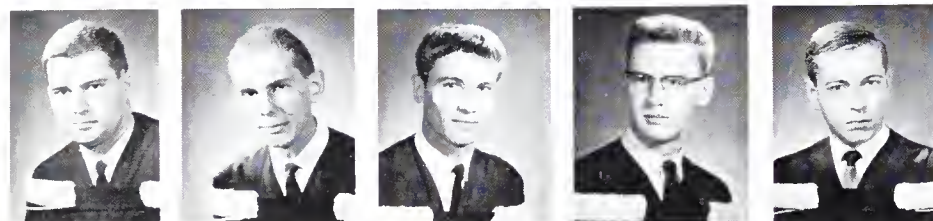
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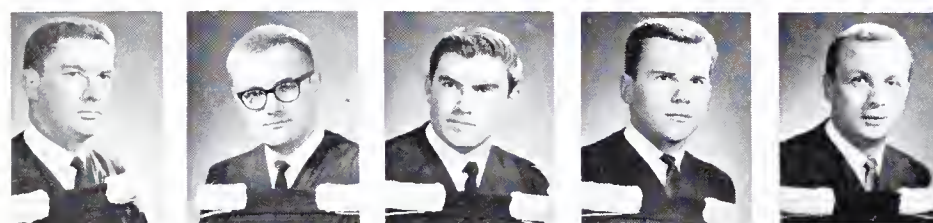
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Gibbons, D. E.
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Kargel, R.
Keenan, F. J.
Laforge, R. C. J.



Manson, W. D.
Marrs, P. L.
Maybank, W. B.
McNally, R. A.
Medicky, B. N.



Miron, H. R.
Pekau, O. A.
Reaburn, A. R.
Robitalle, G. R.
Rousson, L.



Schnarr, B. F. J.
Seppala, A. M.
Tai, K. S.
Talbot, O. N. A.
Waytowich, E. M.



Wicke, A. J.
Willis, D. H.

Chapman, P. M. F.
Ritchie, J. K.



Jolley, D. R.
Mandal, R. K.
Marshall, D.
Walmsley, J. R.
Wilkins, J. D.

Mining



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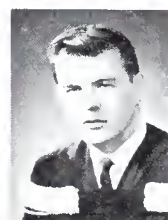
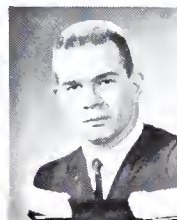
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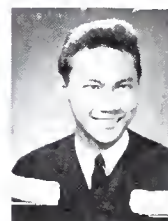
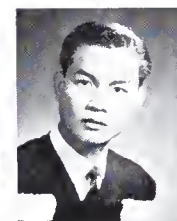
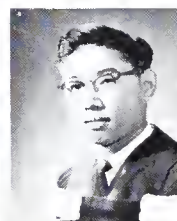
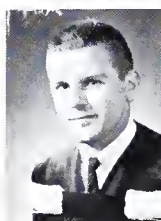
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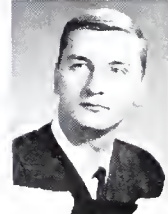
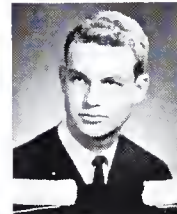
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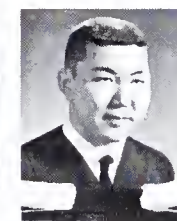
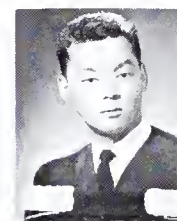
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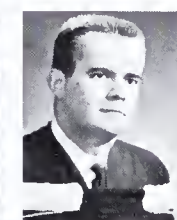
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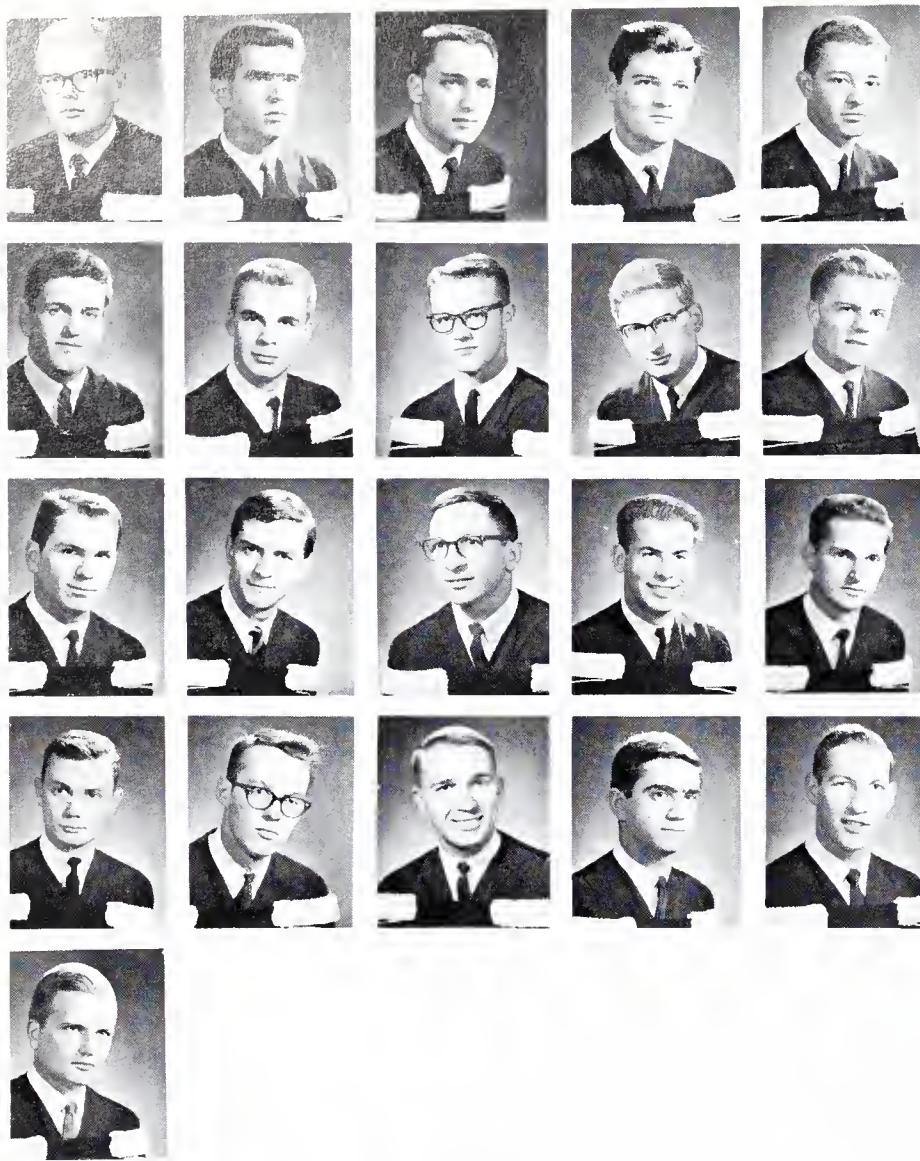
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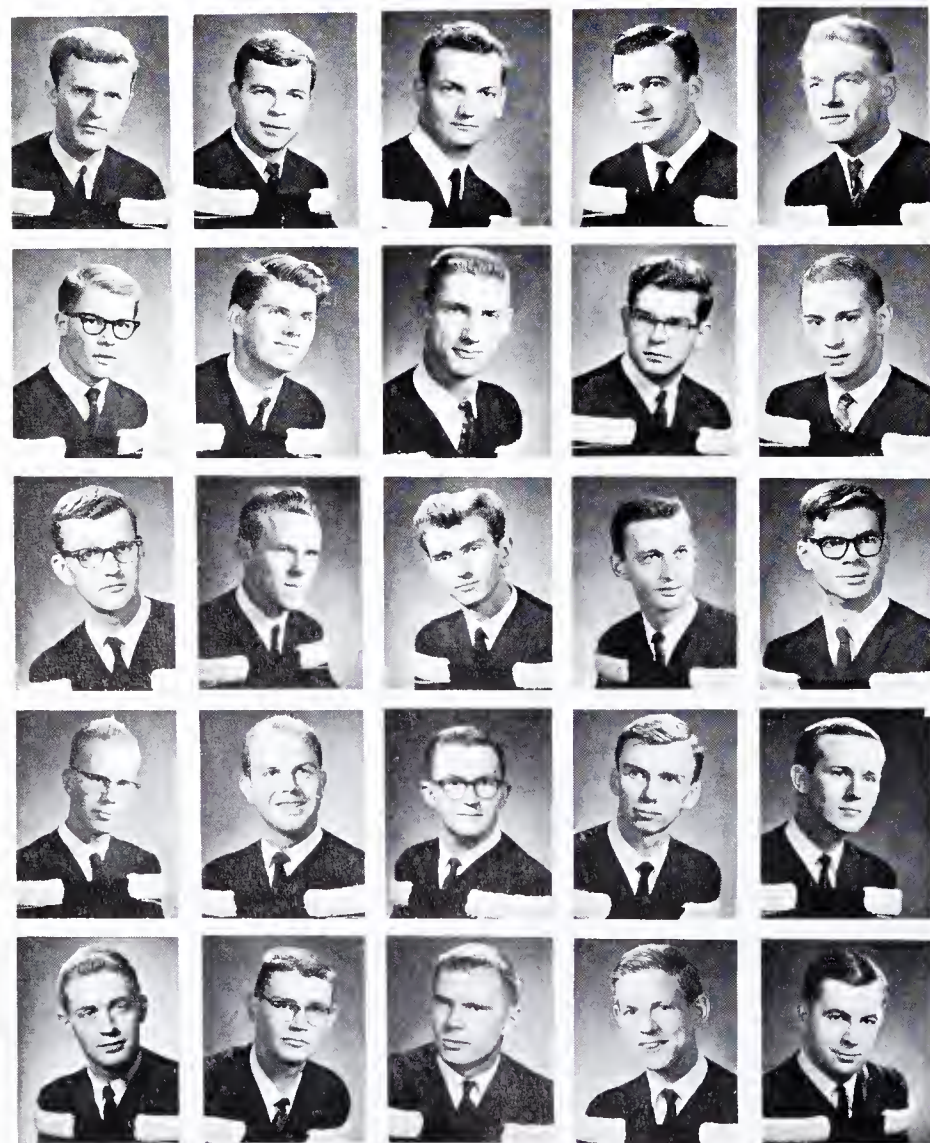
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Mossie, W. S.

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Engineering Physics

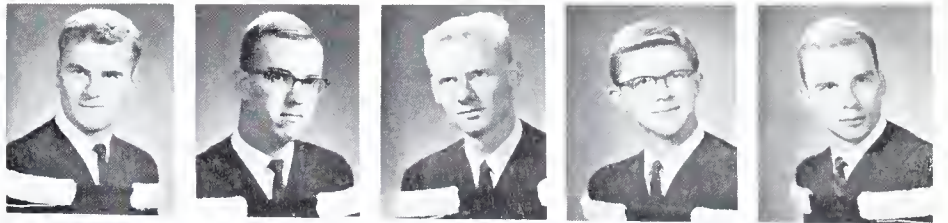
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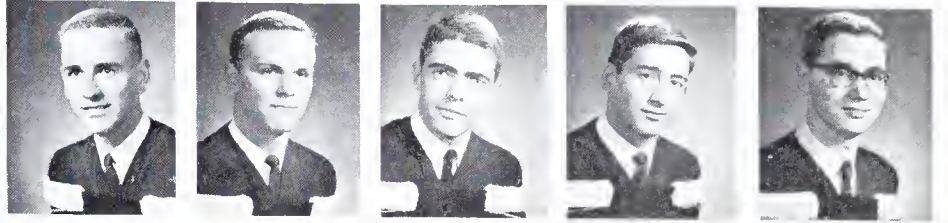
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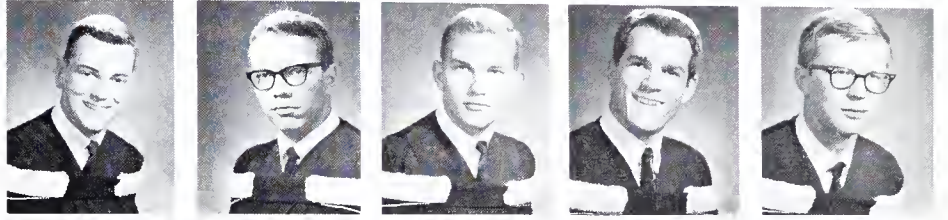
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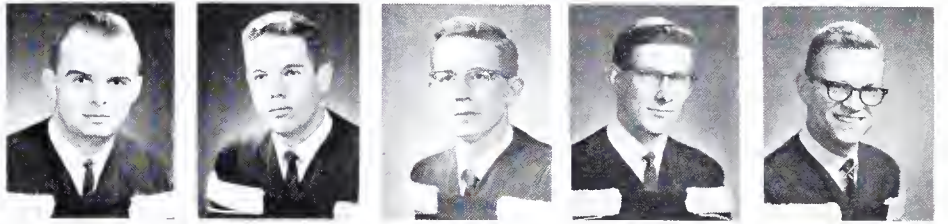
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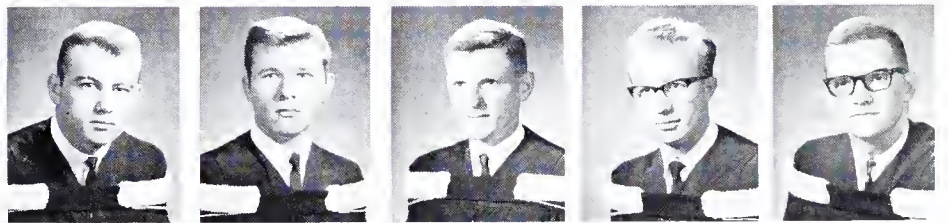
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Chemical

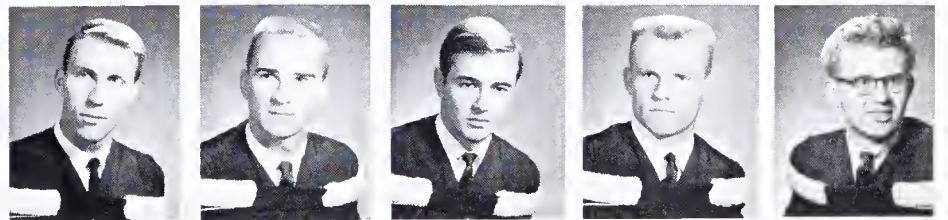
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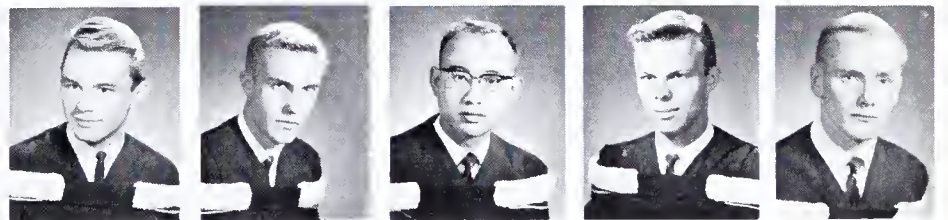
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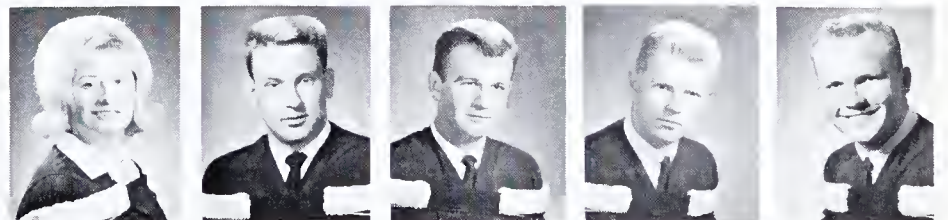
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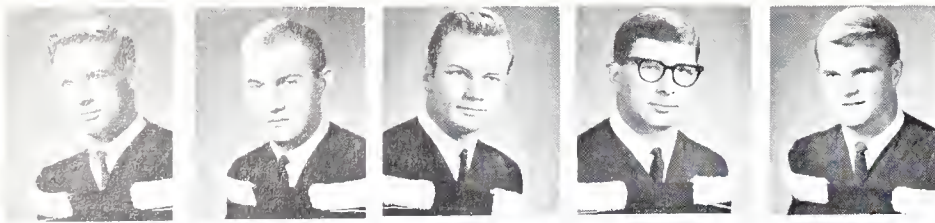


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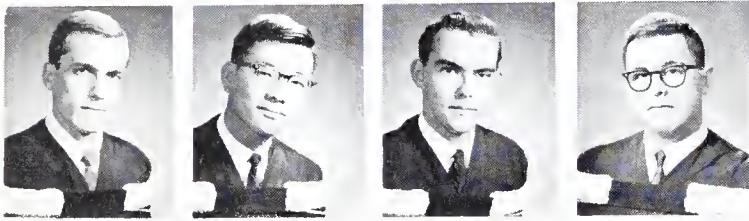
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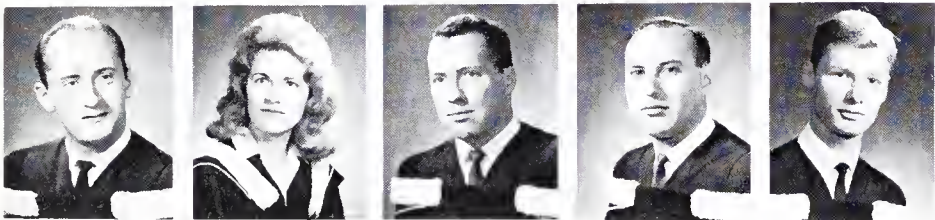
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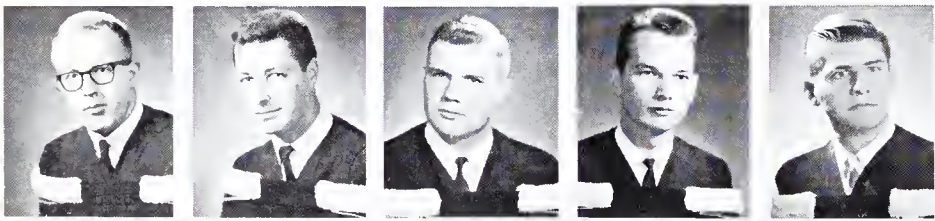


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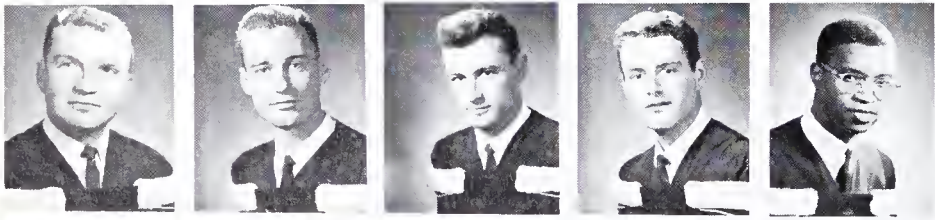
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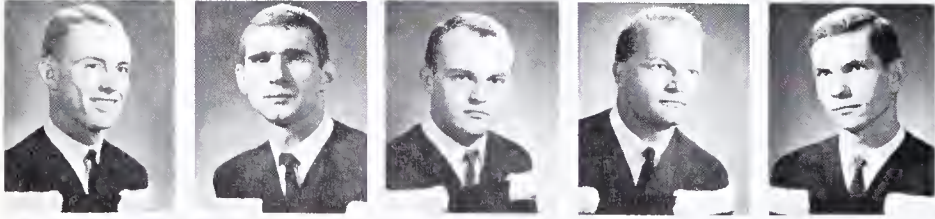
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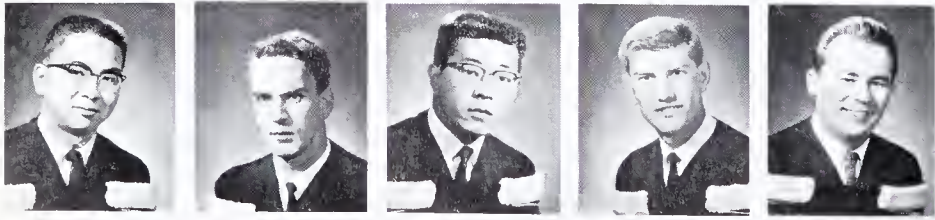
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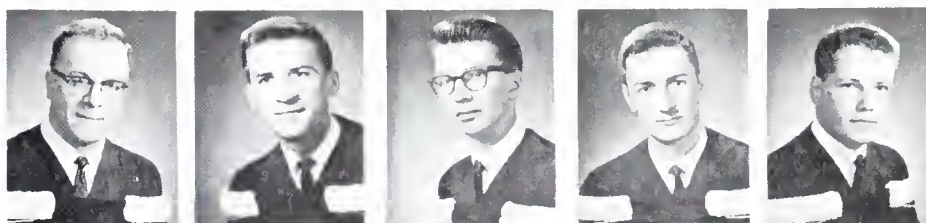


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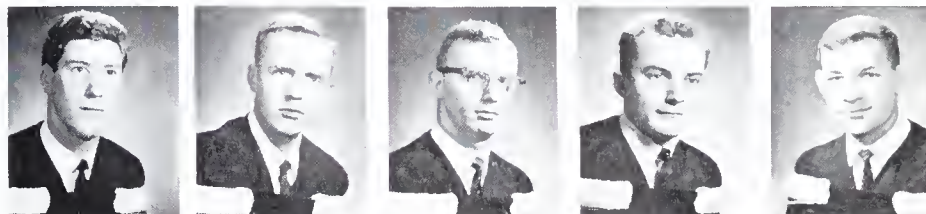


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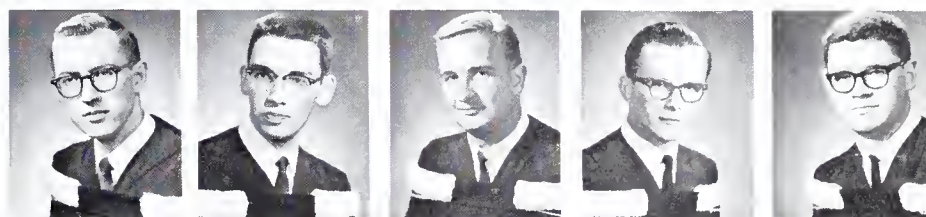
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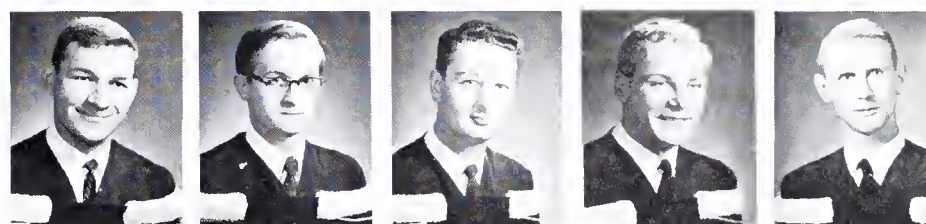
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Scanlon, J. M.



Schallenberg, J. L.
Sendecky, M.
Shaw, R. W.
Smiltnieks, V.
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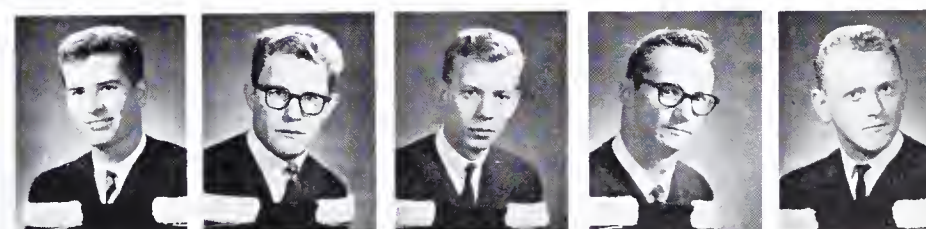


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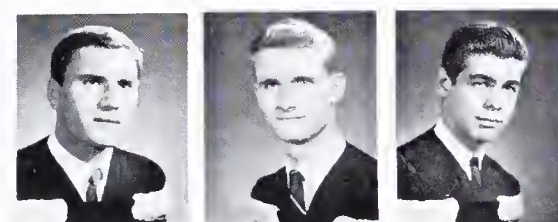
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Applied Geology

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Three P&H Model 1400 (4½ cu. yd.) Shovels at Craigmont Mines have been joined by a fourth P&H machine. Dependability proved to be the factor that swung the decision.

AT THE LARGEST OPEN PIT COPPER MINE IN BRITISH COLUMBIA . . .

Magnetorque-equipped P&H Electrics

CRAIGMONT MINES LTD., now uses four 4½-yd. P&H Electric Mining Shovels.

This mine, 9 miles west of Merritt, is the first major base metal ore deposit found in British Columbia in 40 years. To work it, Craigmont Mines initially purchased three P&H Electrics. Their experience with the original P&H Electrics in terms of production and dependability led to the recent purchase of a fourth P&H machine.

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Magnetorque Hoist Drive combines with P&H Static Electronic Control to provide fast cycling speed. Each of the P&H Electrics is loading out

an average of 7,000 tons per eight-hour shift. The operators say that P&H Static Electronic Control, with its ease of operation, allows them a *full* eight hours' production with minimum effort and delays.

Magnetorque makes the difference

On the job, the P&H Electrics get full dippers every pass. It's due primarily to exclusive P&H Magnetorque. This A.C. motor direct-driven, eddy-current coupling provides higher bail pull—up to 37% more than competitive machines. And



P&H Magnetorque Hoist Drive automatically provides higher bail pull, extra power to meet increasing resistance in the bank and maintains uniformly high dipper speed while digging.

P&H Static Electronic Control responds instantly . . . provides fast, precise spotting and highest productivity.



exceed output expectations by 25%

it delivers this exceptional digging power at uniformly high speed during the dipper motion through the bank. It eliminates the need for crowd manipulation to avoid dipper stalling. Result: higher bail speed, greater fill factor.

P&H Electrics highly recommended

Prime factor in Craigmont Mines' selection of P&H Mining Shovels to supply the 4000-ton-per-

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• • • • •

In analysis of your future mining shovel requirements, it's in the best interests of progress and return on your investment to make a close inspection of the Harnischfeger product—P&H Mining Shovels.

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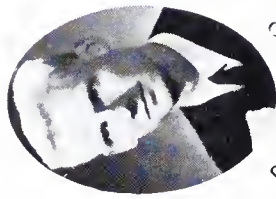
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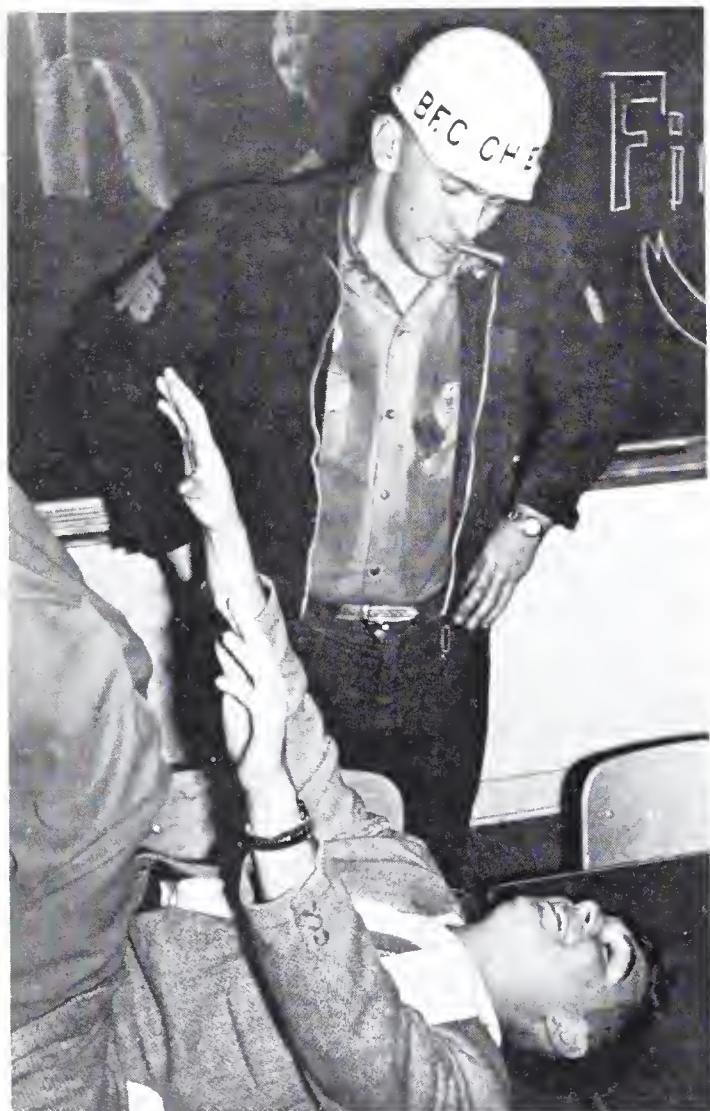


much was said . . .



and much coffee was drunk.

according to ancient tradition
the freshmen were subjected to
registration, and later to con-
structive initiations at caledon farm.



initiations



at the auction for share, more than \$900
was collected



\$179,
the highest
bid

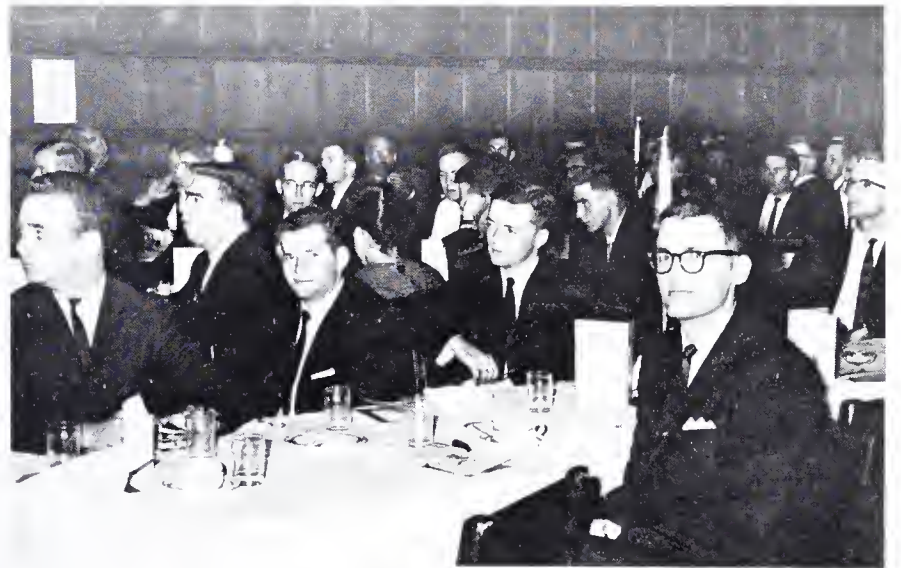


some were able to give
more than
others to the
red cross . . .





74th annual



school dinner

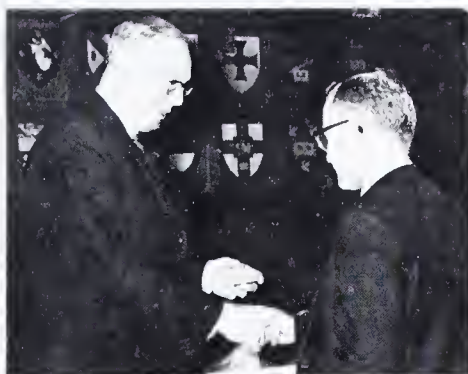
This year's School Dinner, in spite of its only average attendance, was one of the most successful dinners according to many of the staff members present.

Unlike most of the other dinners that we have had in the past, we got a local speaker. Although there were some apprehensions about having a person from the U. of T. address the engineers, the committee was confident that it was not necessary to import a speaker. As it turned out, Dr. D. G. Ivey did much more than speak. His personality set the pace of the night, and made the dinner an informal, yet serious, gathering of engineers.

Dr. Ivey's topic, "The Laws of Nature, New College, and the Noise of Science," intrigued many, including probably the speaker himself. However, through the course of his address, the speaker tied in the three topics in a clever fashion.

The other features of the evening were the presentation of scholarships and awards to students and the Dean's address to the engineers.

This year's committee was largely a one-man effort. This individual shall remain nameless, mainly because it was his duty to arrange the dinner. There is a perennial lack of support for this dinner. For this reason a motion has been passed making the Club Chairmen members of the School Dinner Committee along with the First Vice President. It is hoped that the next year's committee make an early start in obtaining a good speaker.



col. wilson awards first medal named in his honour



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engineers graciously

helped the nurses . . .

homecoming weekend



by 7:30 a.m., they

were somewhat tired.





our president





protesting high

textbook prices . . .

the engineers

picketed bookstore



mc gill



week
end



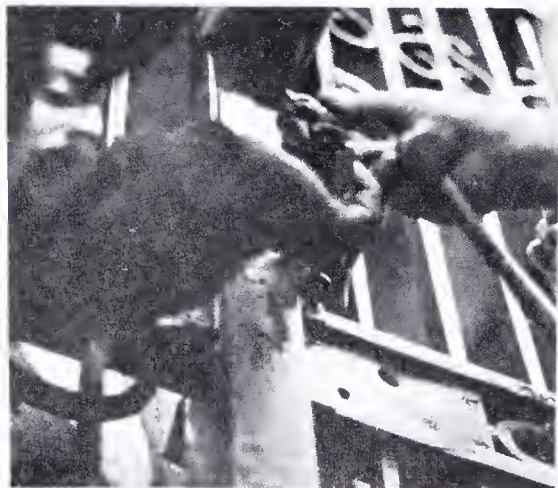


the engineers prevented

trinity from eating

their cake . . .

for a while





arline patterson
coreographer



joe gilling
producer



ken goodman
stage manager

"One of the best shows on campus in several seasons," "on a par with many professional shows in town"—these were the words of the press used to describe Skule Nite 6T4. If ever Skule Nite has produced an outstanding show, this was it.

Music, choreography, sets and scripts all combined to leave the audience applauding madly and laughing for days. James Bond, St. George and the Hollywood epics were sacrificed on the high altar of comedy so that no one could really recall the true stories actually connected with them.

A Skule Nite first this year was the screen spectacular "The Sewer at Bloor Flows Mainly Toward the Don." Those connected with the production will not soon forget the havoc created at the corner of Bloor and Yonge St. on a normally peaceful Sunday afternoon as a two people cow was led across the street and actors were squirted with whipped cream.

To all the cast and crew who worked hard and long despite the frustration and fatigue, a very big thank-you.



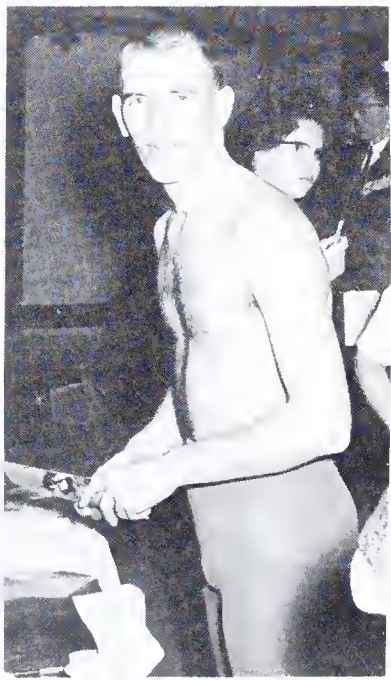
andris skuja
director

skule nite 6T4











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skule saves s.a.c. building

Acting on the basis of sound scientific evidence gathered Tuesday by an advanced study group, the Engineering Brute Force Committee marched yesterday and saved the Varsity Staff from a Horrible Fate.

This research group, equipped with precise engineering instruments such as transits, micrometers, mass spectrographs Clark's Tables etc. took exact (to four places of decimals) measurements of the mass, volume, specific heat, internal energy per mole and resistivity of the S.A.C. building and the Varsity Staff. They were amazed at their results. They had proved, beyond any shadow of a doubt, the veracity of a brilliant Theory proposed (in a drunken stupor, of course!) by none other than Dr. Archibald von Heinrich-Schmidt. Dr. von H-S's theory was that the increasingly large volumes of hot air generated by the Varsity Staff about Skule in recent weeks was creating a powerful lifting force which was incrementally lifting the S.A.C. building into the stratosphere.

Prior to this time the immense mas of the pudgy Varsity Stuffers, er Staffers had been more than enough to hold the building in place (See table 1.) However, now the hot air was being produced much faster than it could escape thereby upsetting the equilibrium. As von H-S put it:

$$R_g = B e^{n+1}$$

Where R_g = rate of generation of hot (approx 619° Rankin) at in ft^3/min .
 e = rate of escape of cooler (approx 41° K) air in ft^3/min .

B = von Kerrs, Konstant $9 \times 10^9 + 10^9$
 N = a very large number

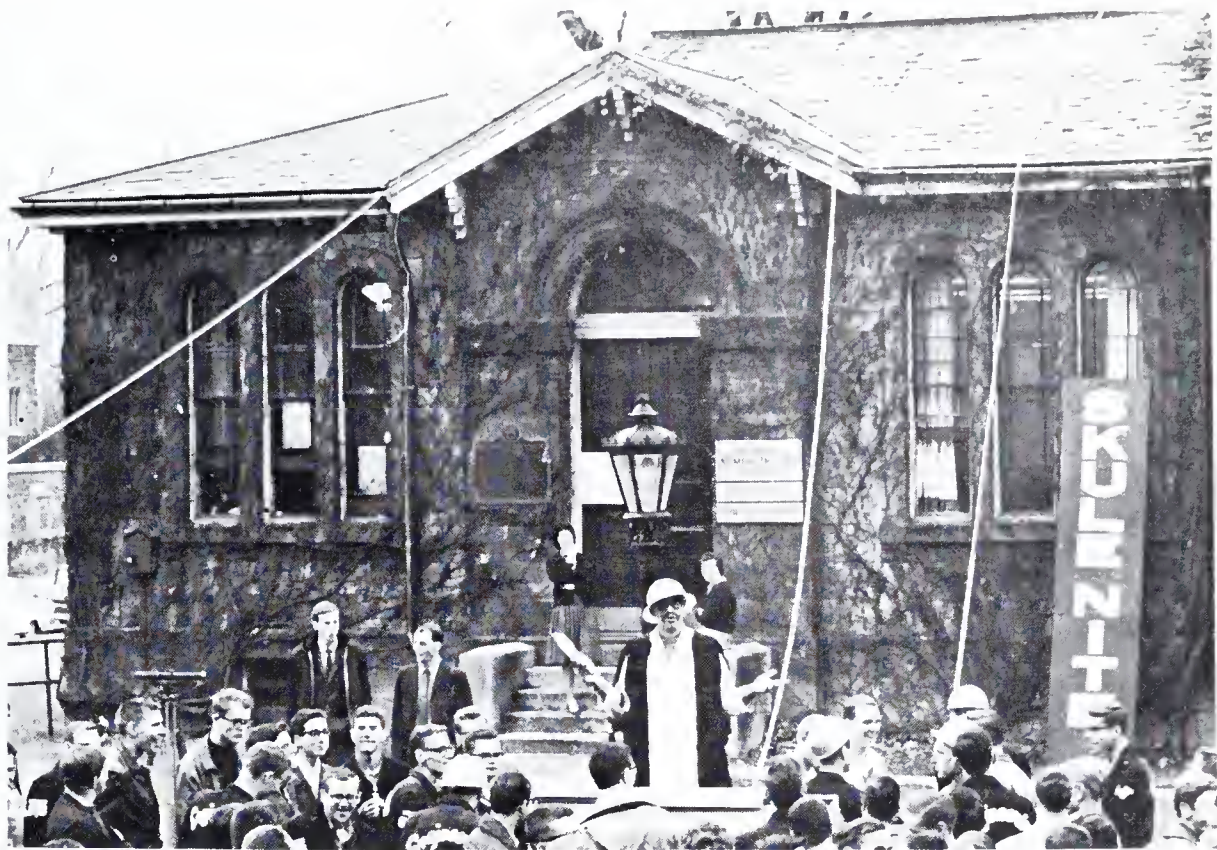
Von H-S surmised that the weight of the S.A.C. building itself was quite negligible w.r.t the sum of the weights of the Varsity Staff i.e.

$$W_{\text{SAC}} \ll \sum_{i=1}^n W_i$$

(SEE TABLE 1)

He shrewdly deduced that only the presence of Rick Kollins in the building and the clinging force (F_c) of the ivy were holding the building down. Upon formulation of his theory von H.S. rushed (41.2 F.p.s.) to the Engineering Stores (Rm 24+0.0, Electrical Building) and shouted out his discovery. No one listened at first because it was 3:02 A.M on Sunday morning and even John Bell wasn't there. Later (31 hours to be exact) when the B.F.C. had been informed, the full significance of von H.-S.'s theory was clear.

The research showed only too well how true the theory was. When, for instance, Mr. Wkr. left the building to buy beer at 3:05 A.M. Tuesday morning, the S.A.C. building was seen to rise 2.1015 in. The increased stress placed on the ivy caused failure in several members (see GRAPH 1). With this and a host of other data on hand the B.F.C. in a humanitarian



effort not soon to be forgotten marched out and tied down the "Flying Fortress," as the building had been dubbed, thereby undoubtedly saving the lives of those innocent bystanders who would have been crushed when the building eventually fell to earth.

This was a major triumph of Engineering knowledge applied correctly in a situation which could have led to gruesome disaster.

There follows a reproduction of a small part of the compiled data:

TABLE 1

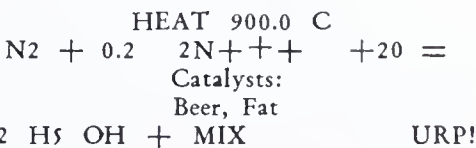
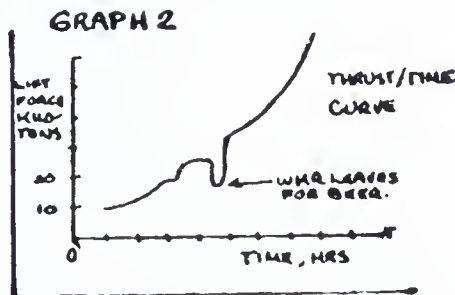
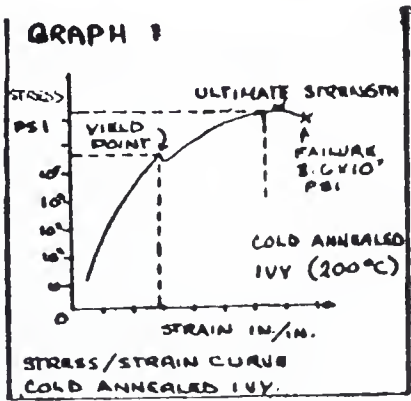
GROSS MASSES OF VARSITY STAFF (MEASURED AT S.T.P.)

- 1 Editor Ken Drushka 3.62×10^2 lb.
- 2 Exec. Editor A. Walker 4.09×10^2 lb.
- 3 Rosemary Speirs 90 Kgms.
- 4 News Editor? ??
- 5 Sports Editor Rick Kollins 9×10^6 KIPS
- 6 Managing Editor Steve Barker 14 lb. 3 oz. (at birth)
- 7 Ass. Sports Ed. Shel Krakofsky 16 tons
- 8 Features Editor Jim Laxer 8.4 KIPS.
- 9 Editor C. Siegeman $140 + 3 \times 10^8$ oz.
- 10 Publicity Editor J. MacKenzie 11.30×10^{-19} ergs.

TABLE 2

DISSOCIATION DATA AND THERMAL IONIZATION FORMULAE APPLIED KHAC =

(H+) (AC—) (Courtesy Dr. Spinner (HAc) Chem. Eng. Dept.)



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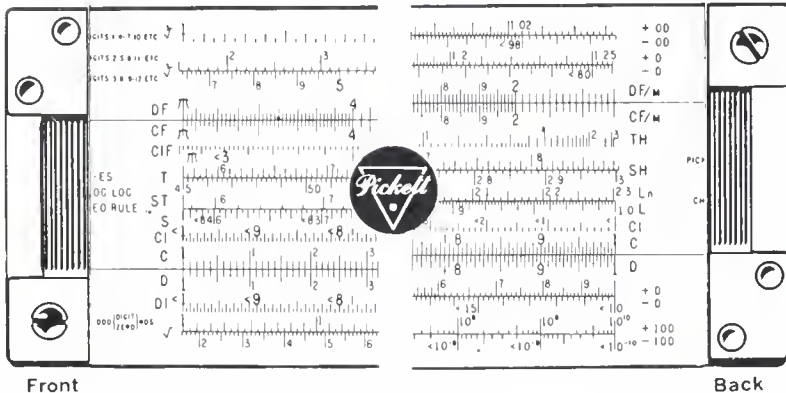
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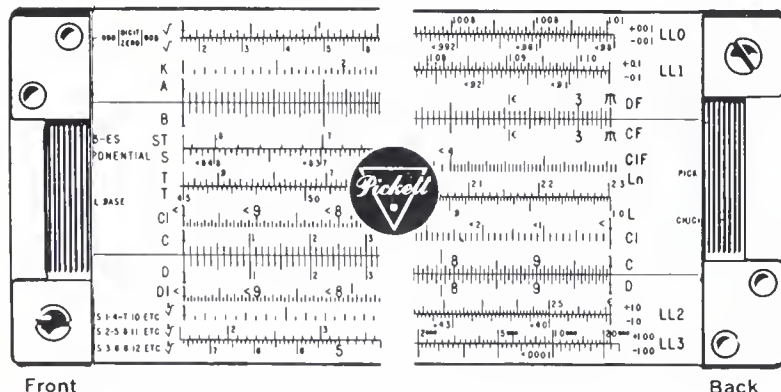
For advanced Mathematics, Science, Electronics and Engineering. This superb computing instrument is undoubtedly the world's most powerful slide rule. There are 34 scale sections functionally grouped for speed and accuracy that include 80-inch LL scales, e^{-23} to e^{23} and 10^{-10} to 10^{10} , plus L and the new Ln (Exponential) scale. To minimize steps, C, D, and CI are on both sides, TT, ST, S, Th and Sh are all on the slide, and the Log Log, DF/M, L and Ln all on one side. In addition to the extended Log Log, there are 30-inch Cube/Cube Root, 20-inch Square/Square Root and 20-inch T scales. Red and black numerals color code direction and relationships.

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with Leather Case and Instruction Manuals

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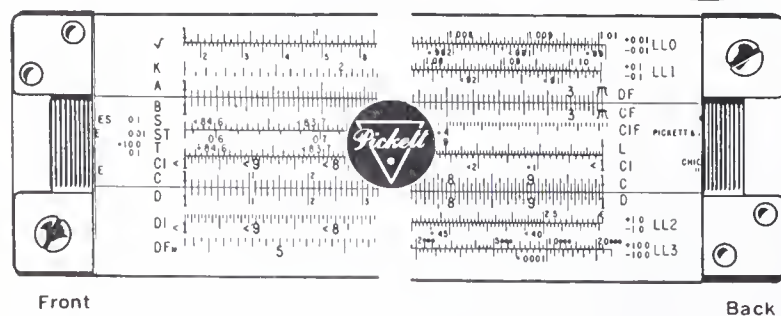
For Mathematics, Science and Engineering. There are 32 scale sections on this model functionally grouped for convenience, speed and accuracy. The 80-inch Log Log scales have a range from .00005 to .999 and 1.001 to 22,000. The Ln scale puts exponents and logarithms to base e directly into combined operations. C, D, and CI are on both sides, TT, ST and S are all on the slide, and LL, L and Ln all on one side. In addition to the extended Log Log, there are 30-inch Cube/Cube Root, 20-inch Square/Square Root and 20-inch T scales. Red and black numerals color code direction and relationships.

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DUAL BASE LOG LOG SPEED RULE

10" Scale Sections, 1½" Body

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for COLLEGE
and Gifted
HIGH SCHOOL
Students



For Mathematics, Science and Engineering. Model N803 has 28 scales functionally grouped for accuracy and convenience that include Log Log scales to Base e and Base 10. The 80-inch Log Log range is .00005 to .999 and 1.001 to 22,000. C, D, and CI are on both sides, all trig scales on the slide, Log Log scales all on one side. The Square/Square Root scale is double length. Red and black numerals color code direction and relationships. Model N800 is a simplified 22 scale Base 10 version of Model N803, accepted as standard in colleges, high schools and industry. This Model is duplicated in the 6-inch pocket size N600.

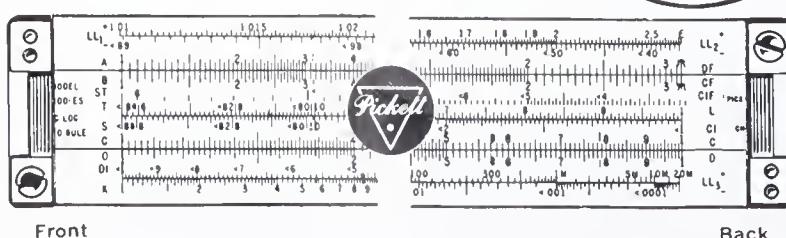
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Model N600ES (Eye-Saver Yellow); or N600T (White)
with Leather Case and Instruction Manual



lord power entertains



posters from the poster contest





the ice palace was built in spite of the warm weather.



the electricals were hopeful . . .



they raced . . .



but the chemicals won again.



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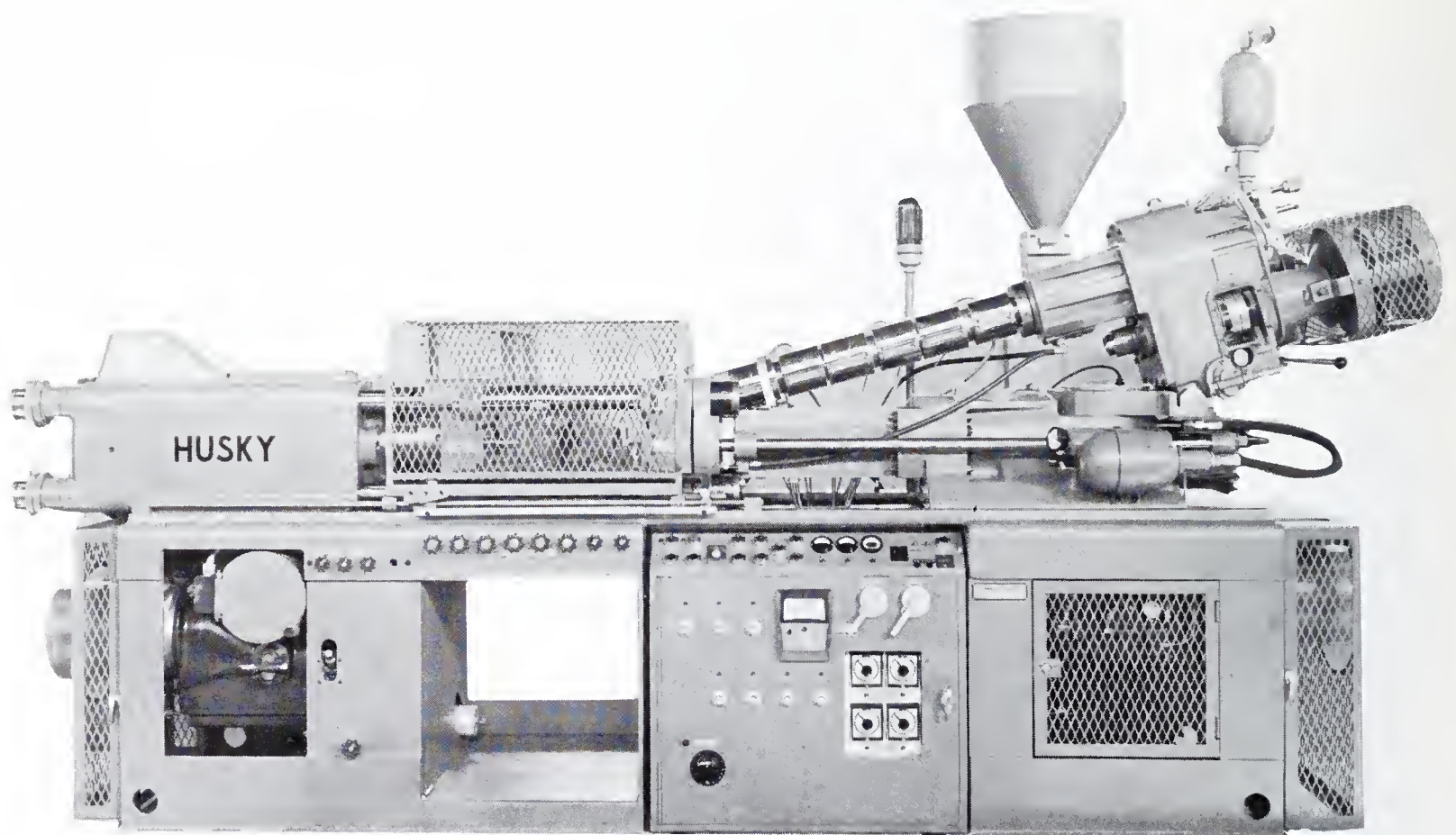


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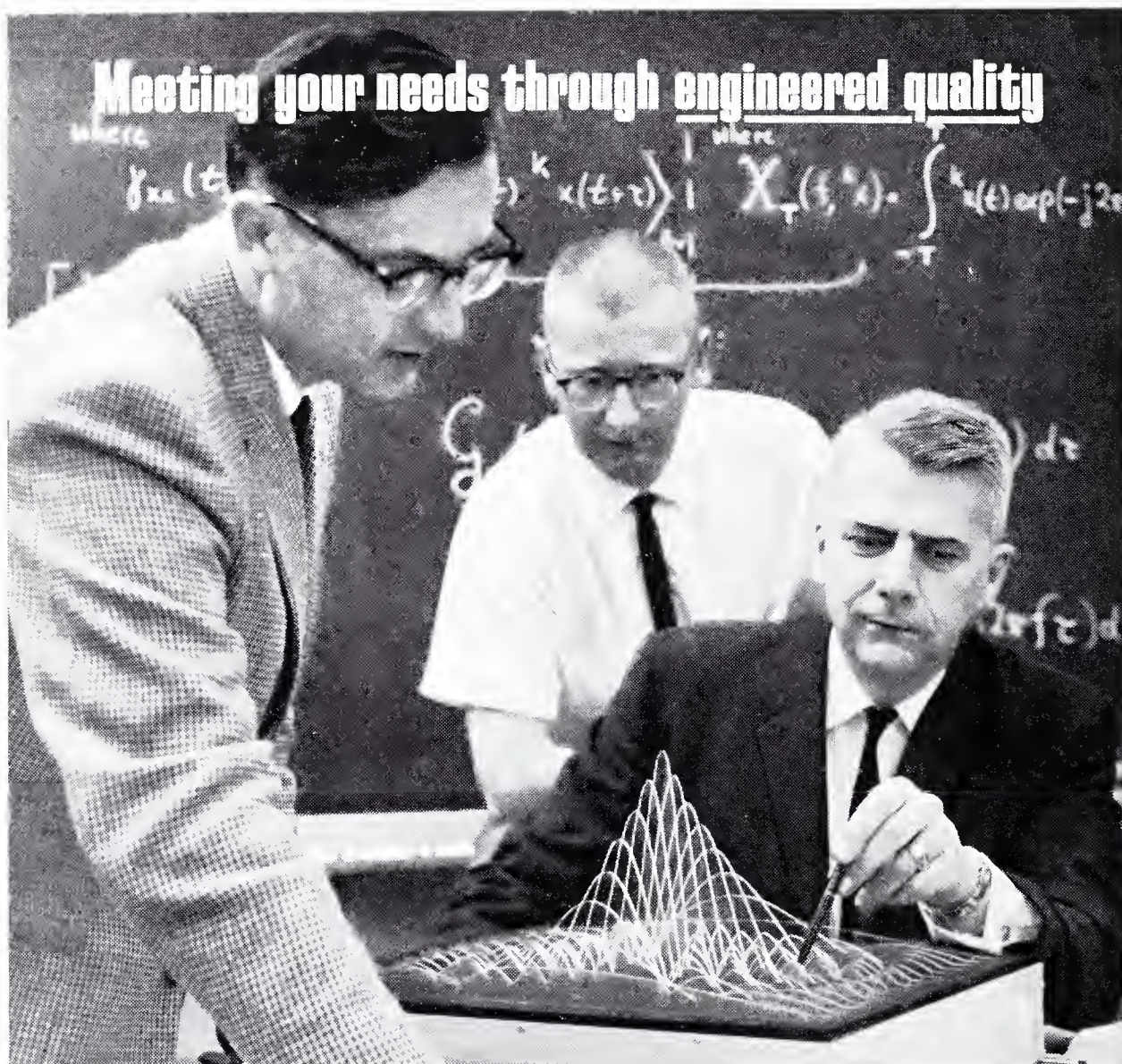
HUSKY

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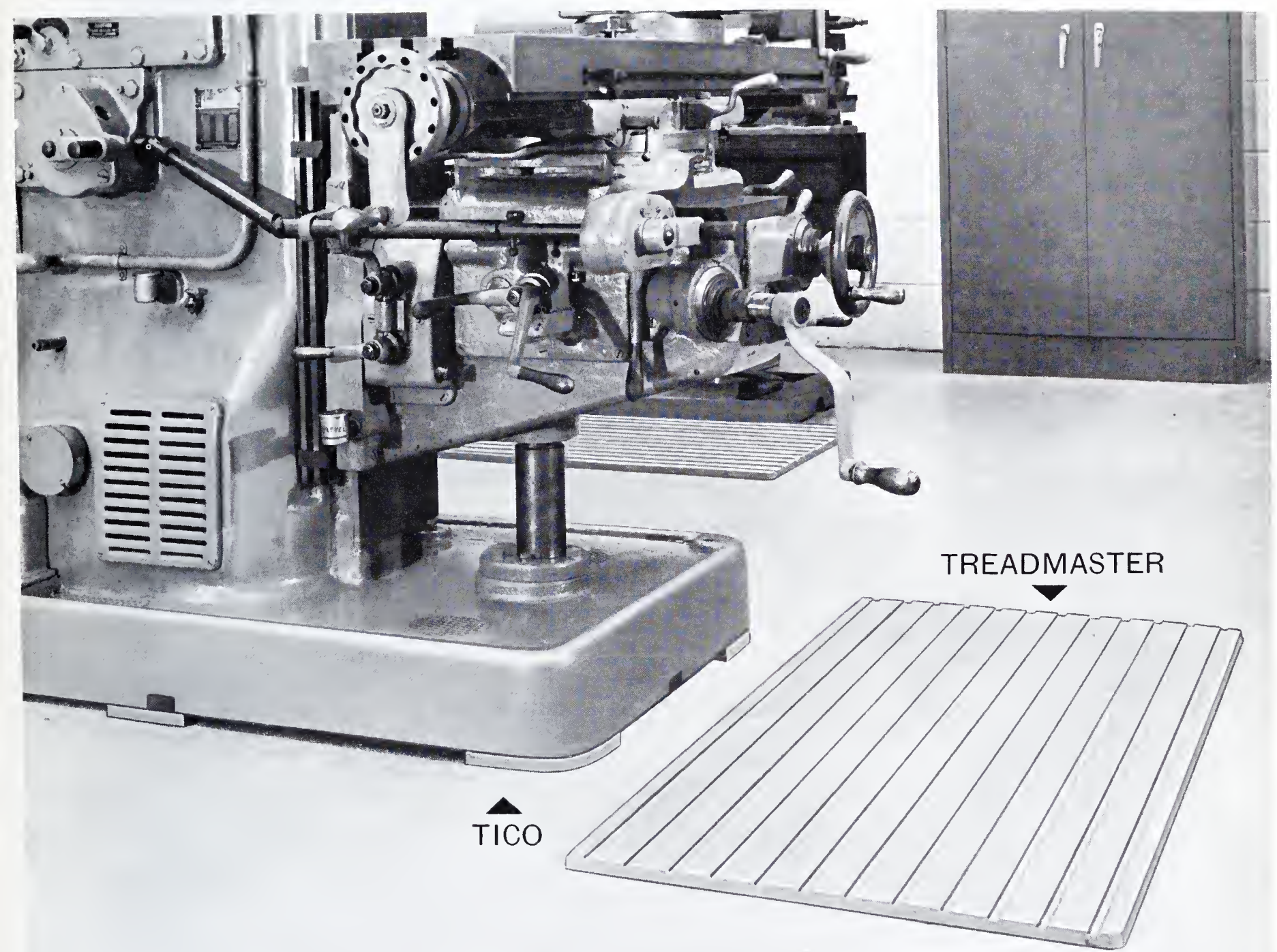
Actually, it's a mathematical formula in three dimensions. It was built by Canadian General Electric engineers. Adjustable to various patterns, it enables our research team to visualize electronic signals under various processing conditions. This unique model is one of many scientific devices to be used in a

\$2,700,000 research program in defence electronics. Applications would be in the communications, radar, missile, and space satellite fields. Searching for tomorrow's values through research is another example of what we call "engineered quality." And it places the *accent on value* whenever, wherever, you buy CGE.



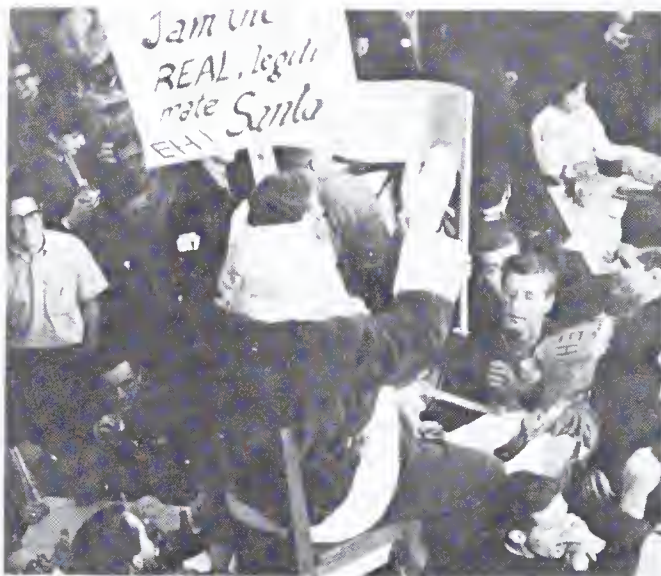
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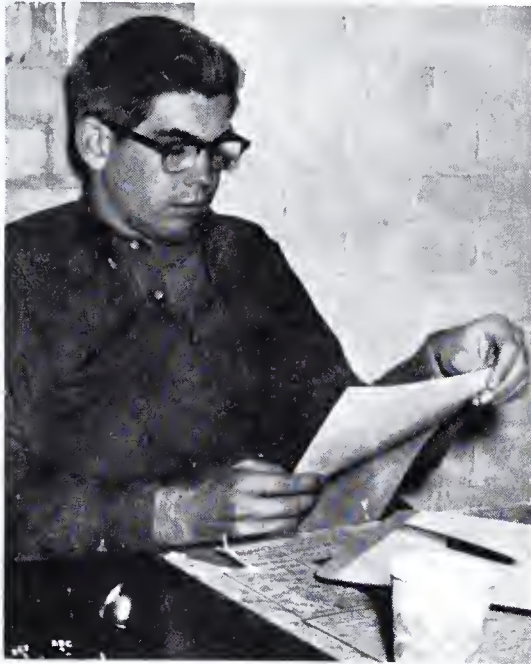
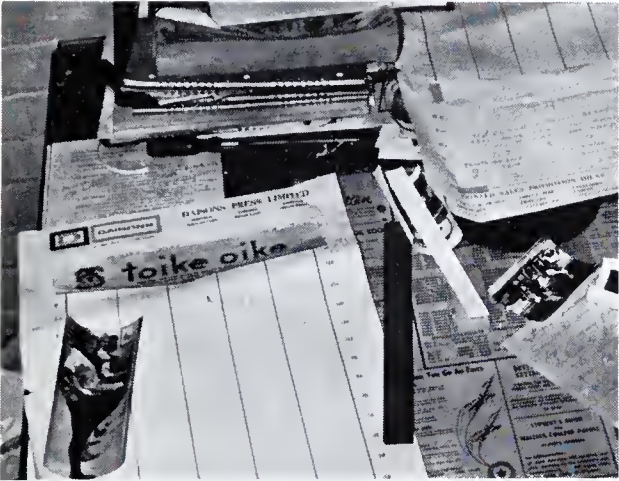


... and other events



toike oike

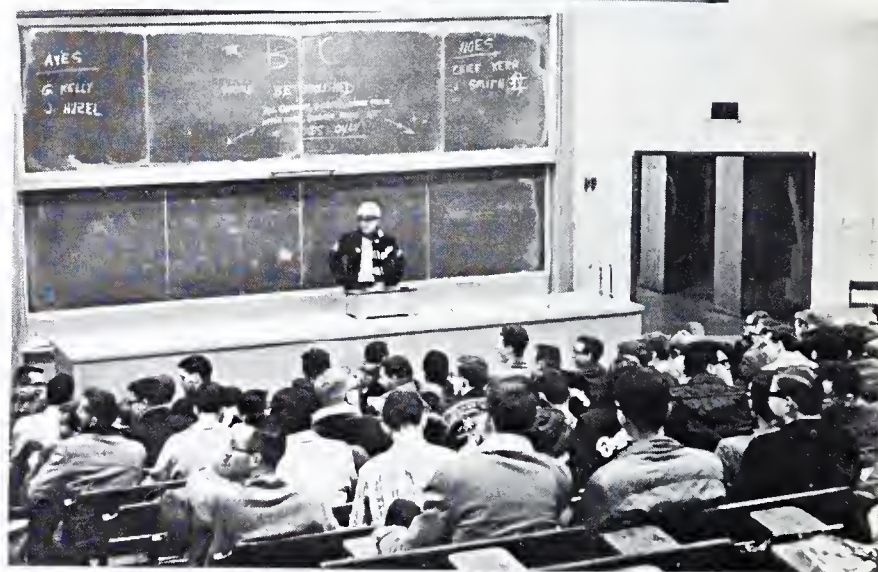
TOIKE OIKE, TOIKE OIKE, OLLUM TE CHOLLUM TE CHAY
SCHOOL OF SCIENCE, SCHOOL OF SCIENCE, HURRAY, HURRAY, HURRAY



With a little over half the season to go, the University of Toronto Engineering Debates Club maintained a phenomenal record of being undefeated and untied in its home arena T-102.

Envious outsiders blame this on the tendency of engineers to conform. The real reason is due to the excellence and fast-talkig intelligent persuasion of the engineers. For instance: Bob Morris's "Beer just has to be better than milk" or Peter Stein's definitive "This is a cow."

For the campus politicos, Skule hosted the speakers from the political parties on the topics of defence, and democratic socialism. Due to the interest of the students and the support of members, Les Segal, Jim Morwick and Ron Evans, the next debate promises to be interesting and witty.



debates club



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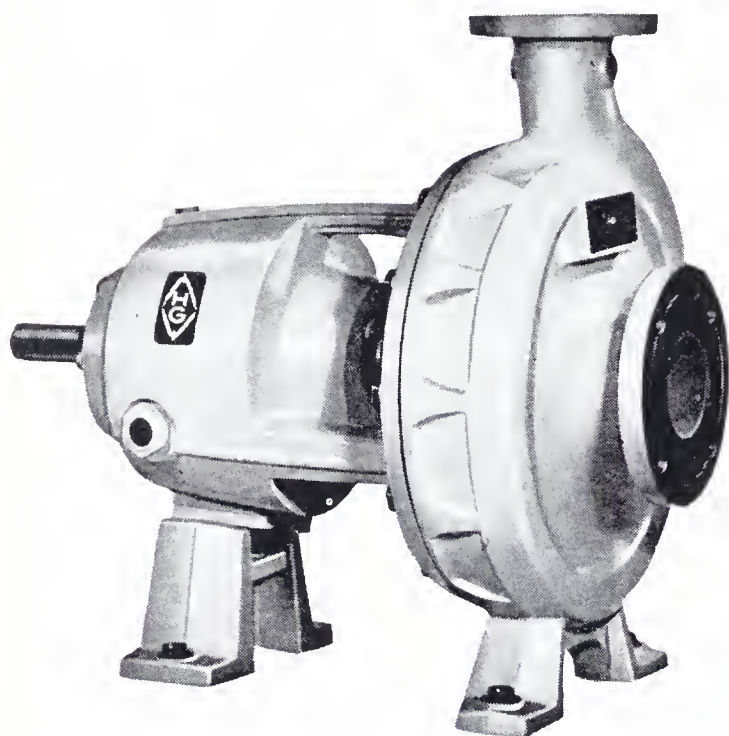
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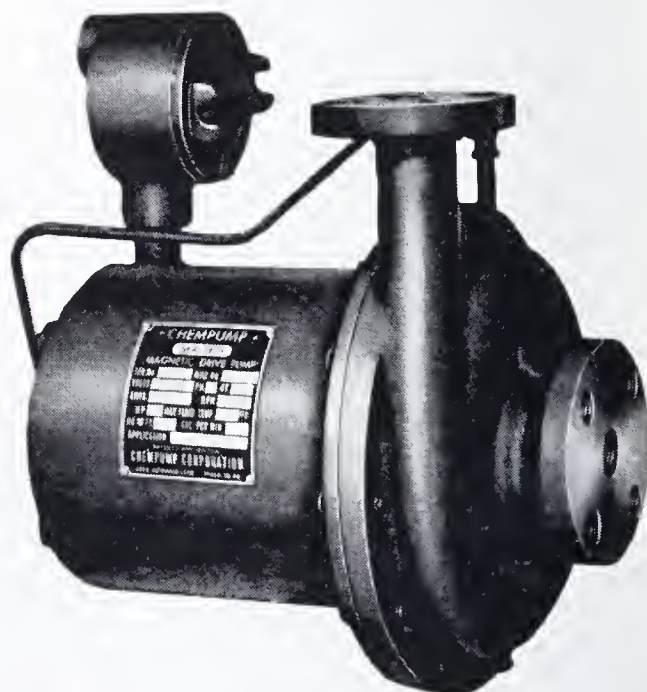
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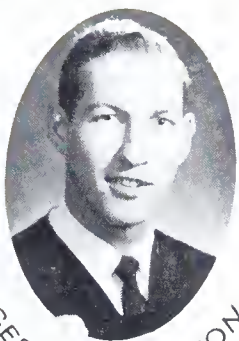
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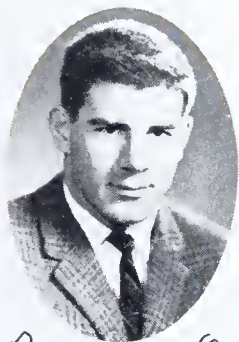
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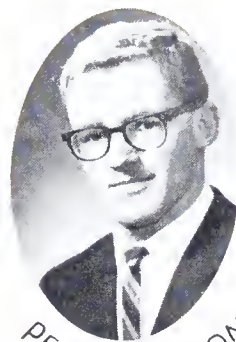




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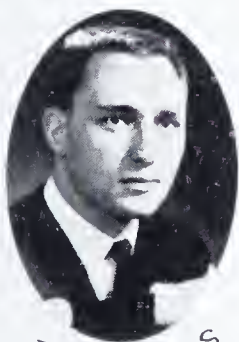


BRYAN ELWOOD
HOCKEY COMMISSIONER

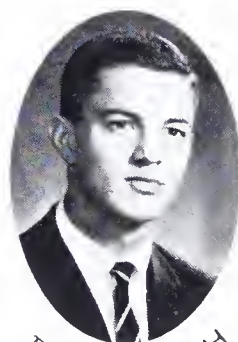


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SOCCER COMMISSIONER

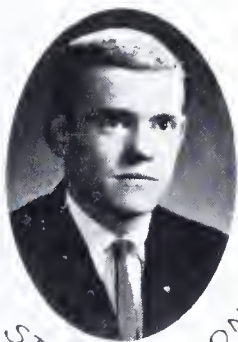
Faculty of Applied
Science
and
Engineering
Athletic Association
University of Toronto
1963-64



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WORD FROM THE PRESIDENT

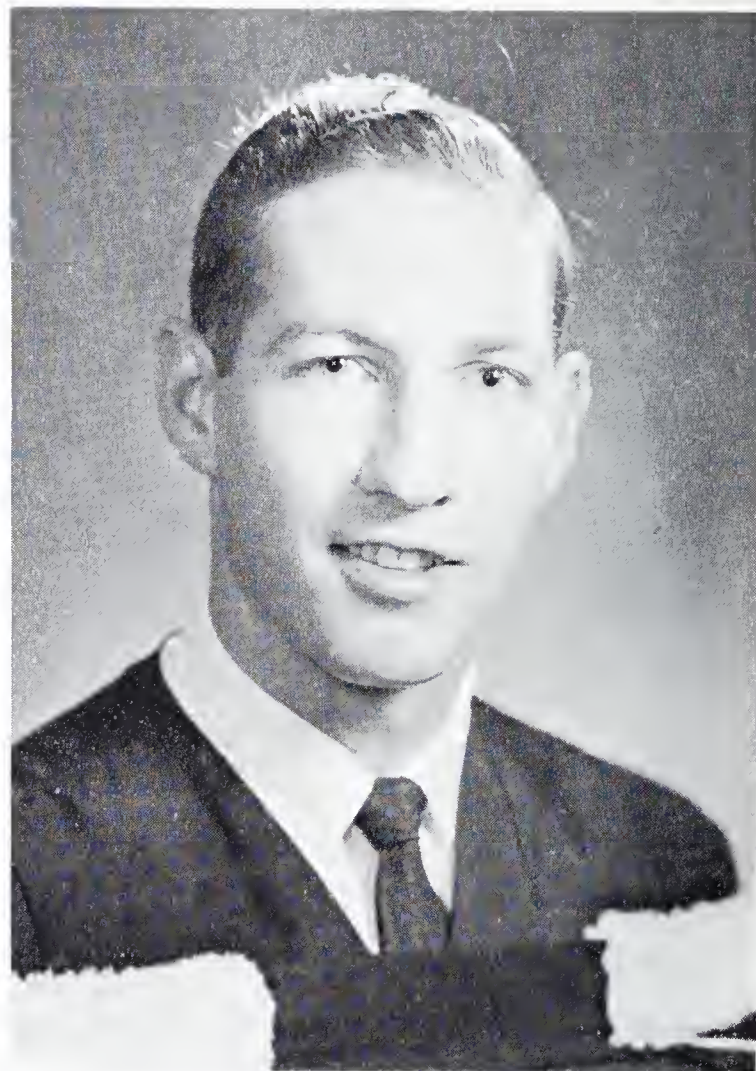
In the annual race for the Reed Trophy, Skule is in third place behind P.H.E. and St. Mike's at the time this article is being written. With our high level of participation in Basketball and Hockey, we should vault into second place, but it is unlikely that we can overtake P.H.E. due to their commanding lead. With a little more effort next year, Skult should be able to escape our perennial place position and take the trophy.

Due to dropping enrollment and the resulting shortage of bodies, we were forced to field only one football team this year. It was hoped that by concentrating our talent in one team, a winner would result. Unfortunately this was not the case this year, but we hope that in the future the football team will see more success.

For those of you who do not frequent the lounge on the third floor of the Galbraith Building, a visit would be in order for you to see the many dazzling trophies and awards which are waiting to be won by Skule's athletes. It is hoped by the Executive that by putting these trophies on display, we will inspire you Skulemen to strive even harder in your athletic activities.

Finally, I would like to thank the many Skulemen who have freely given of their time and efforts to help the Executive to organize and implement the athletic programme. The efforts of the managers, the coaches and most important of all, the many players is appreciated. To all of you we wish even greater athletic success in the future.

Gerry Skelton.



president's message



STANDING: A. Ames, S. Griffiths, D. Black, P. Parry, C. Pracunier, D. Holmes, B. Sheldon, J. Vinklers.

KNEELING: R. Brain, G. Classan.

ABSENT: G. Katsuyama, B. Heath, S. Williams, D. Kit, C. Gray, J. Howard, and a cast of thousands.

This year, Senior Skule, Engineering's only football team, suffered from her perennial shortcomings in size and experience. Over 95% of the team was from 1st and 2nd year.

Their won-lost record was a rather unimpressive 1-5, but a closer look at the scores would indicate a better showing. Four of the losses were by less than one T.D.; 14-7 to Dents, Vic, and St. Mike's, and 13-6 to Vic.

Team captains this year were Bob Heath and Don Holmes and the coaching staff was made up of Ron Near, engineering grad and former Blues inter-collegiate all-star, and Dave Smith, formerly of Baby Blues and now in 4th year Mechanical. Top offensive threat and scoring leader was Glen Katsuyama with 19 points, followed closely by Bob Heath with 18. The backfield was rounded out by freshmen Bob Bagby, Tom Burlington, and John Williams. Up front, the big men were Bill Sheldon, Mike Thoburn, Don Holmes, Bill Martin, and Tony Ono. Dave Church, Roger Brain, Cam Gray, and Jim Howard were tops on defense. In addition, Danny Kit did a great job on punts and played the corner with the best of them.

A very young and spirited team, which should improve greatly next year.

Short Yardage

senior

skule football





LEFT TO RIGHT: D. Taylor, J. Carrington, H. Manuel, T. Bedford, L. Barker, D. B. Long, J. Parry, J. Apse, S. Griffiths.

ABSENT: J. Price, B. Maybank.

Because of a lack of interest by most students of the faculty, Skule was only able to scrape up enough players for one team. The lack of numbers, however, was made up for by team spirit and enjoyment of the game shown by the players in the face of larger and more experienced opposition.

Captain John Parry exhibited his usual fearless, able play at all times, and his presence on the field stabilized the whole team. Slippery scrum half Brian Long showed good form, supplying Skule with needed experience as well as it's only tries. The remaining veteran players, including Juris Apse, John Carrington, Jim Price, and Bruce Maybank aided the rookies in their understanding of the game's fundamentals, as well as providing the team's playing nucleus.

Newcomers included Hugh Manuel, Scott Griffiths, Terry Bedard, and Don Taylor, each of whom had never played rugby before. They all exhibited ability and courage, and their excellent tackling in the essentially defensive game Skule was forced to play was quite prominent. Although lacking experience in the intricacies of open field running, the team won its share of set scrums, and as a defensive squad played well, kicking for touch accurately and often.

It is hoped that next year a lot more skulemen will discover what an excellent sport rugby is; and that with this support, enough players will be recruited for S.P.S. to make a successful showing with several teams in competition.



"Look ma, no pads"

skule rugby

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FRONT ROW, L-R: M. Daschtshuk, J. A. Creighton, E. Maratta, J. Parata, J. Kacmur.

REAR: H. Brasz, S. Caero, A. J. Crlienka, S. Bukajemski, S. Shuper, E. Sereda, G. Shiels.

ABSENT: J. Fulop, L. Lau, O. Cajanek, D. Furst, W. Papailias.

INTERFACULTY CHAMPIONS


The "ARTS CUP," emblematic of interfaculty soccer supremacy, is once more S.P.S. property, with a repeat of last year's successful season.

This year Senior Skule fielded a strong well-balanced team which compiled the outstanding record of six wins and three ties. A strong defence led by Sereda, Lau, Creighton, and Daschtschuk insured success, as in nine games this team was scored upon but three times. Up front, talent and maximum effort by the likes of Fulop, Shiels, and Cajanek gave us sufficient goals for a winning season. In the semifinal playoffs we defeated a hard trying Trinity team two nothing.

The championship was won in a rugged seesaw battle over an upstart U.C. team by the score of 3 to 2. Being scored upon only once in the previous 8 games, our netminder Bukojemski seemed awed at the presence of players and of all things the ball in his goal area. After seeming moments of sympathy towards "Little Nick" of U.C. when he allowed 2 goals, Bukojemski settled down to hold the fort and preserve a win. Fulop with 2 goals and Cajanek with 1 provided the fireworks for Skule.



senior skule soccer



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LEFT TO RIGHT, FRONT ROW: DiPaola, Ewing, Williams, Miller, Cajanek, L. Berger.
REAR: Coach and Man.—G. Bauer; Balweg, Gain, Radley, Bantin, Biroczyk, Honig, D. Furst.

JUNIOR SKULE SOCCER

This was a team of hard trying players, high on effort and short on wind. They beat some of the best, such as St. Mike's and Vic, but lost some close games to eventually earn a second division rating. The team suffered morally and physically with the loss of several star players due to promotion and lack of turnout in the latter part of the season. Stand-outs for the team were Balweg, Gain, Furst, Williams and DiPaola. Coach and manager (soccer blues star) Gunther Bauer supplied the team with moral and technical assistance at all games.

S.P.S. III (Gull Lake Surveyors)

After the first disorganized game (tying Trinity B 0-0) it was evident that the team, with their tremendous spirit and robust play, were on their way to a championship for Skule.

The team was undefeated in season play, scoring 15 goals and having 2 scored against. Defeating Trinity B in the playoffs (2-1) and just being beaten, 3-2 in overtime by VCL, were the highlights of team play during the season.

Individuals on the team were sparkling with varied antics. Bob "The Toe" Smith and his miskicks; Barry "The Rump" Martin and his fearful bodychecks; Aldo "The Great" Paolini and his 4" cleats tripping him up on every white line; and finally Bill Papallias running out of steam after two or three steps, but still scoring 8 goals in the season, were a few of the illustrious players.

Results: We won Group B, Division 1 with a record of 4 wins, 1 tie.

minor league soccer



STANDING, L-R: Jerry McIntyre, Jerry McElroy, Bill Hatkirk.

KNEELING, L-R: Wayne Archer, Gene Petroff, Bruce Burgess.

ABSENT: R. Sanderson, Bill Cass.

SR. S.P.S.

This year's edition of the senior boxla specialists was one of the more talented teams to sport the S.P.S. label. There was a unique blend of talent, ability, and muscle, although these attributes didn't necessarily all come together in every player. The team went to the semi-finals before bowing out to a slightly luckier team from P.H.E. Only a couple of members of the squad will not be back next year and with the strong nucleus remaining, along with the anticipated graduation of some of the more suspicious members of the Phys. Ed. and St. Mike's teams S.P.S. should have a winner on its hands.

S.P.S. II

Although the success of this team wasn't measured by the trophies they brought home, the squad really made their presence felt in their division. They lost their playoff spot in the very last game of the season. Although not sparked by prolific goal scorers the team's play was typified by real stout defensive work.

Most of the fellows on this team will be moving up to next year's Sr. Skule squad and if their enthusiasm goes along with them, then there could be enough spark to light the way to another trophy in the Skule showcase.

S.P.S. III

This team was Skule's rookie squad. Most of the players were first year men playing the sport for the first time. This team had more fun playing the sport than any other team in the whole interfaculty set-up. They were the underdogs of their division yet every game they played was a potential upset. Should this team stay together through their years in Skule, then in about two years time, after everyone has learned how to use a lacrosse stick and get the ball heading in the general direction of the opposition's goal, there should be no reason why it couldn't go all the way.

The team was characterized by the fact that they were a team. Everyone contributed towards an undefeated season in regular league play. Our main offensive threat was Bruce Burgess who is one of the best players in the league. Surprisingly enough Jerry McElroy seemed to find the net this year and scored his share of goals. The scrap and fight was provided by Wayne Archer and Ron Sanderson and the balance by Gene Petroff and Jerry McIntyre.



"Gentle Gene"

lacrosse



BACK ROW: Gord Fraser, Bryan Elwood, Bob Heath, Dave Boal, Craig Simpson, Doug Smith, Keith Bowen, Glen Katsuyama.

FRONT ROW: Bob Awrey (coach), Dave Mathersill, Dennis Decarli, Norm Ferguson, John Killer, Gary Reed, Bill Madott, John Wesno.

ABSENT: Rob. Ball, Al Kucharski, Mike Hollett.

Sr. Skule pucksters, 1963-64 version, seem to be a strong team—at least on paper. With a good proportion of veterans returning from last year's Jennings Cup finalists, early speculation picked this team as "the one to beat." However actual performance during the first half of the season has been somewhat mediocre — the team standing fourth in a five-team league.

Master-minded by Coach Bob Awrey of the Blues, the rinkies shape-up as follows:

—In goal, John Killer performs in his usual and generally consistent manner and at times is spectacular.

—The defence seems stronger and more polished than last year's with the addition of newcomers Norm Ferguson, Bill Madott and Rob Ball to the veteran corps of Dave Mathersill, Dennis DeCarli and Chico Kucharski.

—At forward, fine individual efforts have been given by rookies Doug Smith and Gary Reed. The returnees — Bob Heath, Glen Katsuyama, Craig "Cherry" Simpson, Keith Bowen, "Fluffer" Elwood, and Gord Fraser—have shown an amazing inability to find the mesh, with the exception of Fraser (who is the team's leading scorer).

—Alternating between defence and forward, Dave Boal and John Wesno have given all-out effort when needed.

Why has a team that looks so good individually been restricted to one win in five games and a total output of only eight goals? For one thing the league is stronger this year and "breaks" have been few for the boys thus far—three of the games were decided by a single goal. A lack of confidence may also be a partial answer. However with the second half of the season yet to go, it is hoped that the team will get on the move. With spirit still high and only six points separating the lower four teams, a play-off berth is definitely possible. And this team has the potential and the desire to make it!

senior skule hockey



BACK ROW: B. Chapman, C. Pyke, R. Bailey, R. Arends, R. Luscombe, G. Skeltan, P. Saltzman, B. Martin, B. Clarke, B. Heath (coach).

FRONT ROW: D. Church, T. Lyle, D. Kemp, S. Chambers, J. Killer.



Action Around the Twines.

This year's edition of Jr. Skule is entered in Group III and is doing quite well up to the time of this writing. A strong group of freshmen is backed up by a handful of veterans to make up an ambitious and eager team.

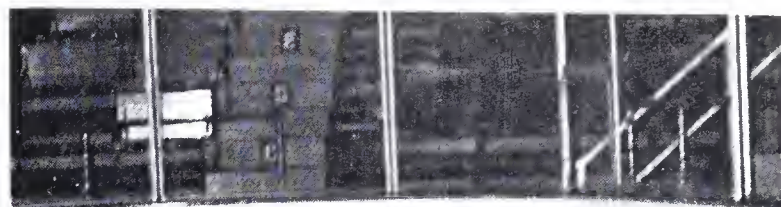
The first game of the season saw the team tie Pharmacy and then after a win over Trinity, we dropped our first game to U.C. The boys then came up with big wins over Pharmacy and Phys. Ed. to wind up the old year in first place. They suffered a minor set-back in the first game of the New Year, losing to Phys. Ed. 4-2 but, they weren't disheartened and will surely give a good account of themselves for the balance of the season.

Top scorer to date has been Captain Ron Arends, with Paul Saltzman and Rick Luscombe hot on his heels. Also coming up with big efforts have been Ray Bailey, alternate captains Jim Chambers and Brian Clarke, and our defensemen Barry Chapman, Dave Church and Bill Martin. Rob Hall, one of our top early season players has since departed to join Sr. Skule. Last, but not least, a good season turned in by Dave Kemp in goal.

junior skule hockey



The Draw



The Clutch



"Salted" Away

SKULE STANDINGS

(As of Feb. 1)

Team	Won	Lost	Tied
S.P.S. I	3	0	1
S.P.S. II	2	1	1
S.P.S. III	1	2	0
S.P.S. IV	0	3	0
S.P.S. V	1	1	1
S.P.S. VI	3	1	0
S.P.S. VII	2	0	0
S.P.S. VIII	2	1	0
S.P.S. IX	1	2	1
S.P.S. X	1	0	1
S.P.S. XI	3	1	0

action at varsity



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SENIOR SKULE VICTORIA STAFF CUP CHAMPIONS

To the surprise of absolutely nobody, Sr. Skule has once again demolished all opposition on their way to yet another undefeated season which saw them win the interfaculty championship and the Victoria Staff Cup for the umpteenth consecutive time, and indication of the strength and depth of the team can be had by the fact that the so-called "second team" would often come off the bench and defeat the opposition by a more decisive margin than the "first team." Returning from previous championship teams were veterans Steve Bukojemski, Jim Creighton, Bob Parnes, George (Yo-Yo) Spolsky, Ted Puszyński and Wally Roscha. Reg. Eadie and Tony Onno, both newcomers to the team and excellent all around players proved to be valuable acquisitions. Rounding out the team were John Vinklers and Erik Randman.

Throughout the season the team managed to defeat the likes of U.C., Trinity, St. Mike's, Pharmacy and Law and Meds with very little effort. In fact the strongest opposition the team faced was our own farm team, Jr. Skule, whom we defeated in the finals by 3 games to 1.

Next year the team loses only four players through graduation, and coupled with a number of fine prospects from Jr. Skule, there should be little trouble for Sr. Skule in once again reigning as interfaculty champions.



TEAM LIST: Dennis Springle, Steve Shuper, Jim Rose, Bill Popoillios, Morcus Esmits, Romon Berezowski, Borry Clarke, and a number of fine rookies.

JR. SKULE

Jr. Skule this year completed what must be regarded as a highly successful season. They ended the season in first place in their division and in the semi-finals they defeated Meds by 2 games to 0. Unfortunately they found themselves up against Sr. Skule in the finals and although they didn't win they did manage to embarrass the Seniors in one game by the score of 15-1 before bowing to their more experienced counterparts 3 games to 1.

The team was loaded with talent including veterans Dennis Springle, Steve Shuper, Jim Rose, Bill "Pops" Papailias, Marcus Esmits and Toman Berezowski. Barry Clark proved to be a valuable addition to the team. A number of fine rookies caught on with the team.

Minor League Standings (As of Feb. 1):

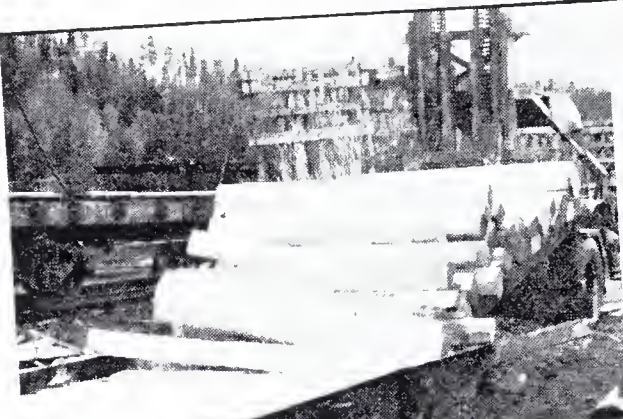
Team	Won	Lost
S.P.S. A	5	1
S.P.S. B	0	7
S.P.S. C	1	4
S.P.S. D	2	3
S.P.S. E	6	0
S.P.S. F	3	3

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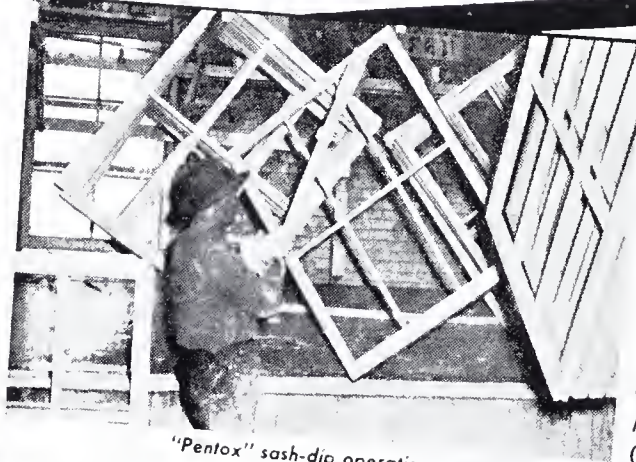
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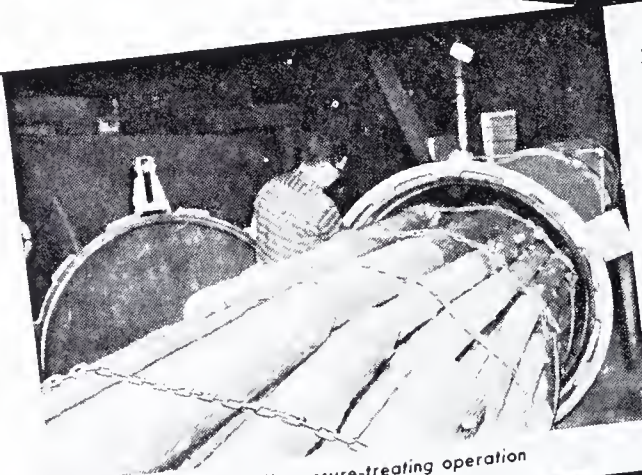
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SR. SKULE WATERPOLO

STANDING: John Harper, Jim Parker, Bob Giffis, Mike Chapelle, Bill Jackson.

KNEELING: Peter Stern, Tony Adams, John Hastings, Marv Mandelbaum.

ABSENT: Jim Leitch, John Vinklers, Pete Casson, Gary Closson.

Skule this year has entered 4 teams in the waterpolo league and because 1st and 2nd yr. boys fill most of the positions it looks like Skule's future success in this sport is assured.

Sr. Skule is led by John Harper and Marv. Mandelbaum from the blues' waterpolo team, ably picked up by Tony Adams, John Hasting and freshman Mike Chappelle, to mention only a few. The team is off to a slow start but the potential is there to go all the way.

S.P.S. II

This team consists of Harry Koukal and his fellow 4th year Chemicals. After 4 years of playing together most of them have finally learned to swim and a few can even handle the ball so they should be one of the major threats.

S.P.S. III

This squad is the big question mark this year. For their first game, they managed a shutout, but for the other team (0-10). A little bit of practice and this will be a solid squad.

S.P.S. IV

The youngest of Skule's waterpolo teams is made up of 1st yr. Industrial and Mechanicals and this will be a top team if it sticks together for the next few years.

SKULE SWIMMING

Skule has lost one Chapelle (Marv.), but gained another (Mike) and in the fall freshmen meet, he was the outstanding swimmer, winning the breaststroke (in record time), and the 200 yd. individual medley. Feb. 20 will see the interfaculty swim meet at Hart House, and our swimmers, led by Marv. Mandlebaum and Mike Chapelle, should be able to uphold skule's reputation in this sport.

waterpolo, swimming



STANDING, L-R: Bill Cass, Grant Leishman, Marcus Esmits, Reg Eadie, Tom Etsell.
KNEELING, L-R: Enarz Soste, Jim Metcalf, Les Saunders, Wayne Shepherd.

There was a major reorganization to the interfaculty league, and from the planning board came a four-team league. This league is about the strongest ever to compete in interfaculty competition. Sr. Skule is one of the teams, and although their record is nothing to write editorials about, they have held their own, save for a few bad breaks.

Most of the members of the team are from last year's finalists. Significant additions were Reg. Eadie, Jim Metcalf, and Enarz Soste. In the year that the others have had to drown their sorrows over last year's defeat, Marcus Esmits came back with more springs in his legs and more width in his shoulders so that the opposition doesn't even try to rebound when he's on the floor; Tom Etsell became philosophic to tell everyone else why they shouldn't mind so much losing a game; Grant Leishman came back with a shot designed to fool the opposition into letting him shoot when he wants to because his shots look like they'll never go in — this year there was no arc in them at all; Les Saunders came up with a foolproof argument for convincing referees that the number system didn't go as high as five when it came to counting personal fouls; and Bill Cass went into the coaching business.

Most of this team will be back next year and if the few trouble spots that they ran into this year are patched up with additions from the Jr. Skule team, then Skule should reserve a spot for the Sefton Cup in its trophy case.

sr. s.p.s. basketball



Unleashed.

Skule Track and Field

The following track men defended the honour of skule in the fall meet at Varsity: J. Salovaara, U. Priller, M. Zander, F. Gruehl, D. Dowell, P. Berezowski. In his division, J. Salovaara placed first in the discus and second in the shotput. As the year progresses, individual events are in progress at Hart House, and the iron men of skule are sure to come though with Red Trophy points.

Wrestling

In the fall meet at Hart House, Skule wrestlers really came through, winning two out of three divisions they entered. Bob Tuffis and Steve Black were the winners and Tom Ken also competed.

Jr. Skule Basketball

This year Jr. Skule has come up with a strong team and they are currently in second place in the second league. Two of the team's losses have been by close scores to Medicine, who are the leaders. The team is practically assured of a playoff spot and with the steady improvement they show from game to game they should be tough in the playoffs.

Barry Clark leads the guards this year with his all-round play in the backcourt. Ian Hale and Howie Nakamura give him strong support when they are out there. Vido Worang is the top scorer so far support with George Graham controlling the offensive and defensive boards. Riivo Ilves also gives a good, hustling all-round performance every game with everyone pulling together the team should go for the playoffs.

Minor League Standings (as of February 1st)

Team	Won	Lost
S.P.S. Gull Lake	0	3
S.P.S. 6T7	2	0
1st Industrial	1	1
S.P.S. 5T1	2	0



It's up, but is it in?

jr. skule b-ball, track, wrestling



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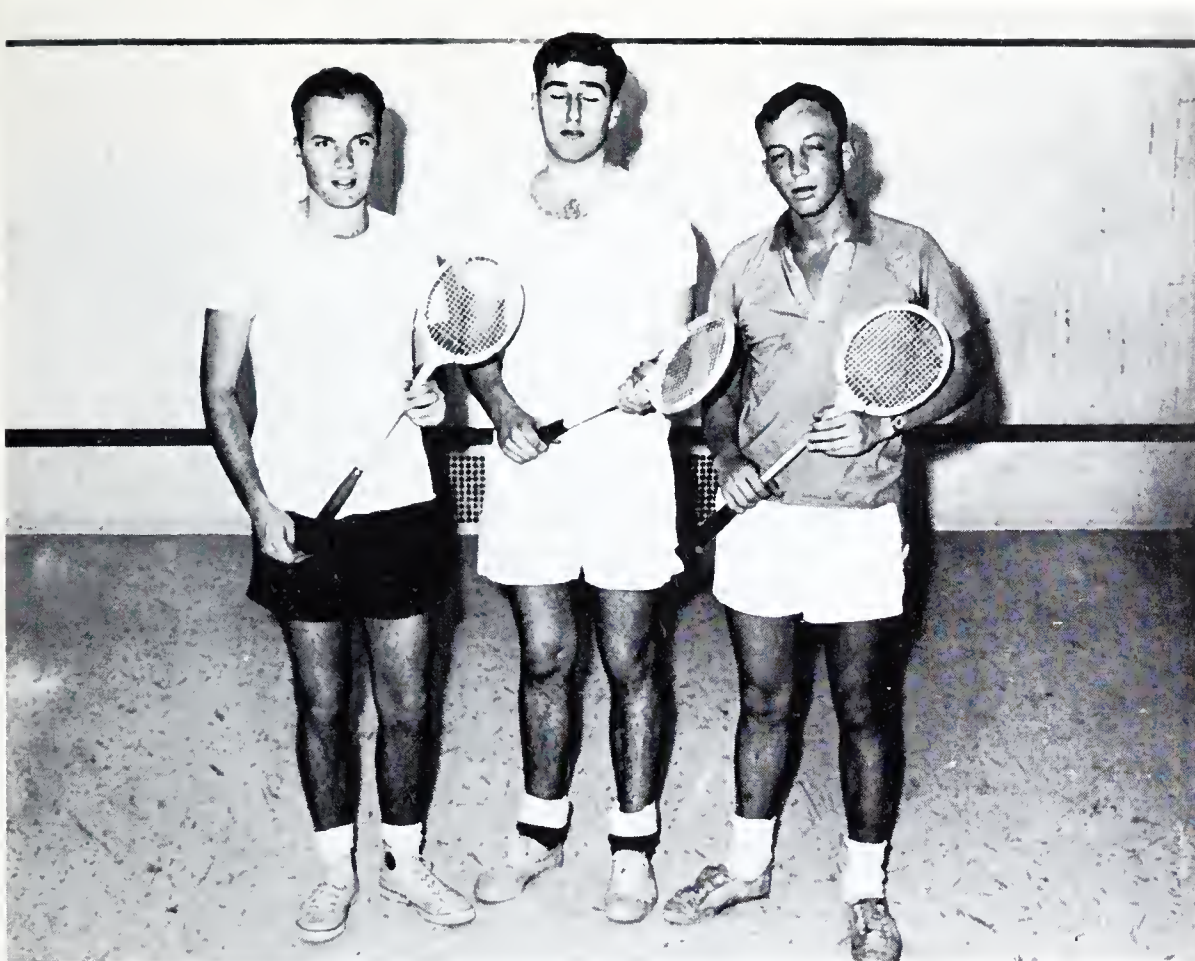
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ONTARIO HYDRO



SR SKULE

Bill Grober, Dick Maltby, George Robson, Jim Kerr.

The 1963-64 intramural squash league was contributed to by six S.P.S. teams. The most senior team, (and supposedly the best), Sr. S.P.S. can boast only a 2-3 won-lost record. However these games are played against top rated players from Vic, Meds and U.C.

There are precious few IV year veterans from Skule but we have Dick Maltby, Mel Goldberg and Bill Graber who will be back in the courts next year.

S.P.S. I

This team has split its matches 2-2 so far this season despite the talents of Juri Koor, John Sherk, Craig Simpson and Murry Morris. These players, however, have had a difficult schedule and will undoubtedly finish the season with a record more consistent with their abilities.

JR. S.P.S.

Jr. Skule have not managed a win but the experience gained will be valuable to the team members next year. It should be noted here that none of these men were experienced and even equipment was borrowed for the first matches. Grand McNabb, Paul McDermott, John Simons, Brian Cole and Paul Ostrowski will be back next year to add to their experience to next year's Skule teams.

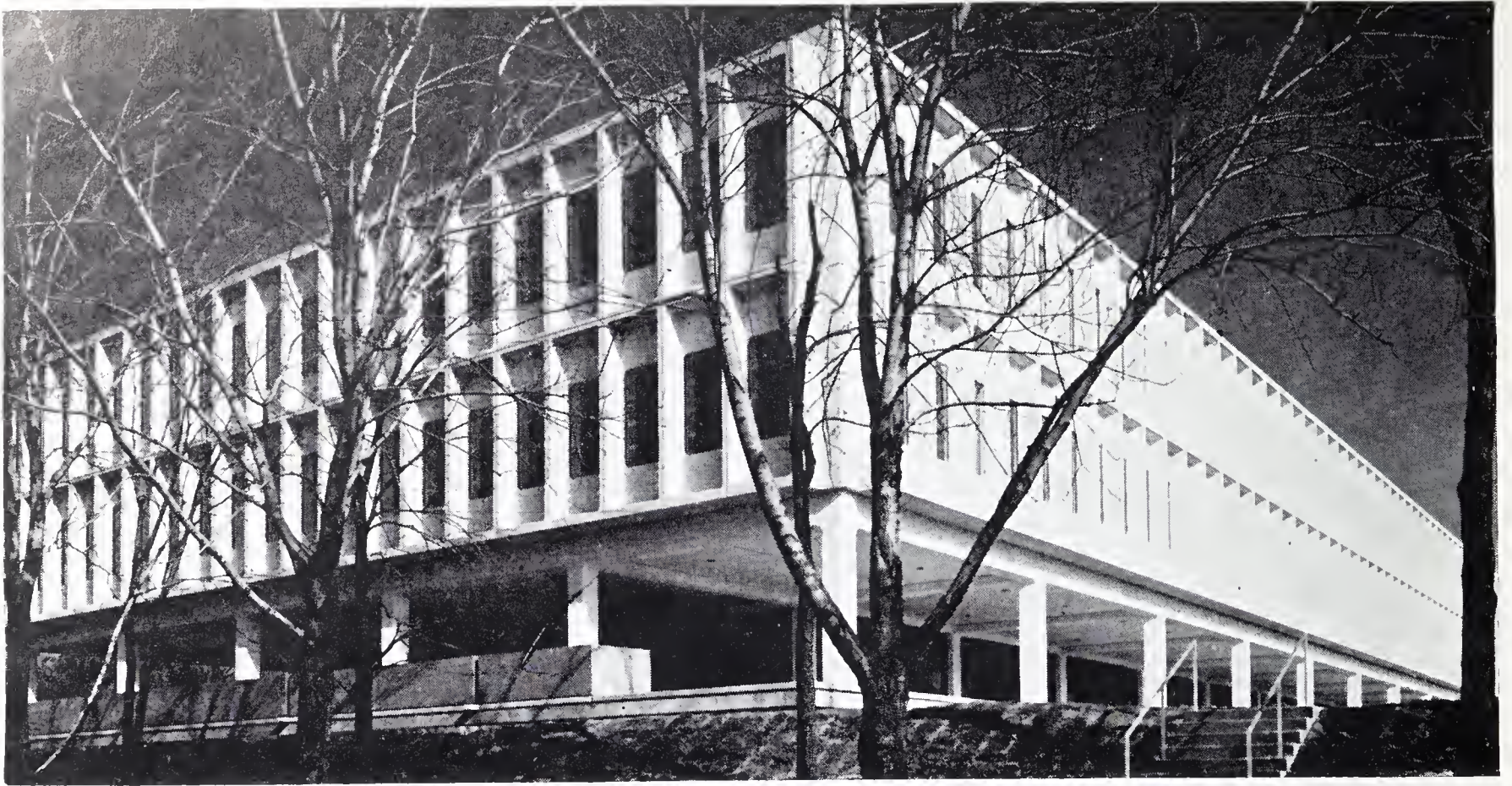
Skule Standings (As of Feb. 1):

Team	Won	Lost
S.P.S. II	1	2
S.P.S. III	3	1
S.P.S. IV	3	0

SKULE TENNIS

Skule was represented at the interfaculty tennis meet, held at the Toronto Lawn Tennis Club in the fall, by P. Furst, M. S. Zell, I. W. Thomson and D. Coultis. Doug Coultis also played on the varsity tennis team.

squash, tennis



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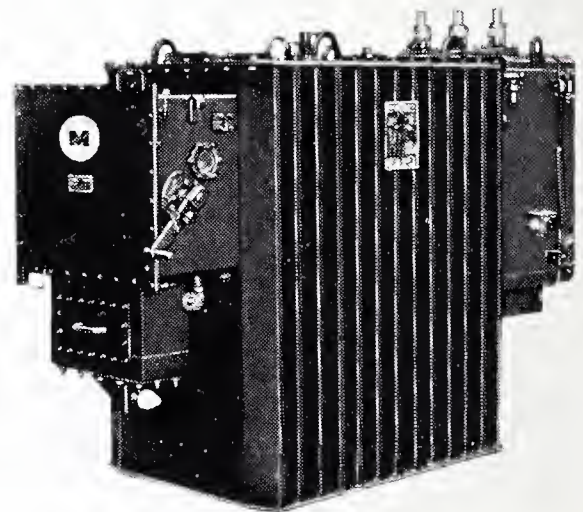
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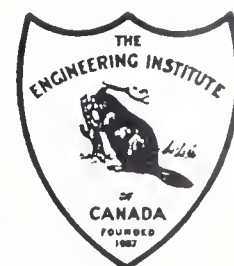
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- * Continuing Education—establish your own educational program leading to your planned objectives.
- * Professional Identification—take part in the technical and professional organizations. Identify yourself as a professional man by exemplary personal conduct.
- * Responsible Citizenship—accept your responsibilities as a citizen. Take part in the affairs of your community.
- * Selected Reading—read and absorb the written experiences of others.
- * Personal Appraisal—analyse your personal and technical capabilities.

For help you may refer to:

The Association of Professional Engineers of Ontario

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